Chapter 1
Introduction and Background of the Study

1.1 Introduction

Student flows across borders are an important part of internationalization (Reeve, 2001; Wiers-Jenssen, 2003). In the past decade, more than 1.5 million students have studied outside their home countries (United Nations Educational, Scientific and Cultural Organization: UNESCO, 1997). In 2000, there were more than 1.5 million international students in Higher Education Institutions (HEIs) around the world (Hyam, 2001; Bohm, et al., 2002). The U.S.A is the destination country which has the highest number of international students, followed by the U.K and Australia (Maslen, 1999). Nevertheless, the United States still hosted more than one third of the international students around the world over the last two decades (Cummings, 1991; Hyam, 2001; Bohm et al., 2002; IDP, 2002b).

The number of international students from developing countries, who have studied abroad for their first degree in a developed country has grown substantially since the end of the second world war (Hughes, 1998). Jolly (1997) stated that there are four particular factors that have influenced this growth. Firstly, the globalisation of many businesses has created the need for those businesses to link with international education experiences via an international network. Secondly, the demands for broader cultural experience and language training have been increasing. Thirdly, the growth of expert knowledge has created an opportunity for international higher education institutions. Finally, an increase of income levels in some developing countries has stimulated the demand for international higher education service. The growth in the number of international students around the world has been associated with the financial status of educational institutions (Kinnell, 1989). Universities in some developed countries, for example the U.K and the U.S.A have been given inadequate funding from their governments (Kinnell, 1989). This included some developing countries such as Thailand (Department of Export Promotion of Thailand: DEP, 2002a). Lack of government funding has,

therefore, affected the universities financial status. As a result, they have had to look for other sources of income to increase their revenue (Kinnell, 1989). The demand by international students from developing countries for an international higher education service has created an opportunity for many developed destination countries such as Australia, especially for an increase in the nation's revenue (Industry Commission, 1991; Department of Education, Training and Youth Affairs: DETYA, 1999; Arambawela and Zuhair, 2003; IDP, 2003a).

The latest statistics from IDP Education Australia (IDP) show that the contribution from the international education service to the Australian economy in 2003 was $AUD 4.2 billion (IDP, 2003a). It is not only revenue for institutions and host countries from which benefits are gained but also the diversity in culture to which the host country is introduced through international students (Emanoil, 1999). Further, this is a good opportunity for local students and residents to learn about people who come from different countries (Emanoil, 1999; Reeve, 2001).

A recent report about international higher education service identified internationalisation of higher education as a process of combining an international academic dimension in each of teaching, research and the institutions' services (IDP, 2002a). In addition, Reeve (2001) stated that the internationalisation of an HEI is a commitment, together with teaching and learning activities to development in becoming an innovative university. She suggested that the scope of international higher education activities is to contribute an international perspective to teaching, learning and research functions of HEIs and it has been the key of the international higher education service, especially to approach international students. Reeve (2001, p.1) also said that:

> "...Internationalisation is important in order to: ensure further growth, development and reputation, meet rapidly increasing demand for international education, add value to the educational experiences of domestic students, produce graduates with global understanding, skill and imagination, enhance reputation for contemporary relevance and quality and foster international relationships and inter-cultural understandings…"

1.2 Statement of the Problem

Global mobility in the higher education service has been recognised as an important factor not only by developed English-speaking countries, which are leaders in this service, for example the United States of America, the United Kingdom and Australia, but also by some eastern non English-speaking countries such as Japan (Bangkokbiznews, 2002) Singapore, Malaysia (Matichon, 2003a) and Thailand (Manager, 2003). The English language is also considered a global language in communicating across the world and influences HEIs around the world when they offer international programmes as they use English as a medium of instruction for international students (DEP, 2004). In addition, there has been an increase in demand by international students who want to study abroad and this has continued to grow rapidly (Tilbrook, 2003). Therefore, HEIs around the world have attempted to provide and improve their international higher education in order to attract more international students to study at HEIs in their own countries because those international students have brought benefits to the host countries such as revenue (Industry Commission, 1991; DETYA, 1999; Arambawela and Zuhair, 2003; IDP, 2003a) and have contributed to the diversity of culture (Emanoil, 1999; Reeve, 2001).

In order to offer the international higher education service and attract more international students, HEIs and the host countries need to understand trends in this service and understand the factors affecting international students when making a decision to study abroad (Mazzarol and Hosie, 1996). Furthermore, understanding international students' experiences about study abroad after their enrolment is also necessary by HEIs and the destination country (Eduworld, 2001) in order to improve their international higher education service in the future. Therefore, learning about factors that international students have considered when making a decision to study abroad and their experiences when they were studying in the destination country is very important. In addition, opinions from people involved in the international higher education service will be helpful in providing good directions in offering the international higher education service to international students (Smart and Ang, 1992; 1993; 1995).

In this study, the research was conducted in two countries: Thailand and Australia. Australia was chosen as a benchmark English-speaking destination country because the international higher education of this country has been successful, especially in terms of the number of international students (Tilbrook, 2003) and revenue generated for the country (Industry Commission, 1991; DETYA, 1999; Arambawela and Zuhair, 2003; IDP, 2003a). In 1997, the total number of international students in Australian institutions was 151,150 (DETYA, 1999). Since then, there has been steady growth, with the number of international students in the higher education sector rising to 62,996 in 1997 compared to only 21,112 in 1989 (IDP, 2001). Over the past six years from 1997-2003, the growth in international student numbers in the higher education sector stabilised and in semester 1, 2003 174,641 international students were enrolled at universities around Australia (IDP, 2003a). This was an increase of 233% since 1997 and an eight fold increase since 1989. Although Australia is one of the leading countries in offering an international higher education service, it still needs to improve this service because high competition and international students' needs in their choice of study abroad might be changed. Therefore, it is very necessary for Australia and its HEIs to conduct surveys in relation to international higher education service regularly, because the results will be able to help them to be understand international student needs and improve the quality of the international higher education service in order to compete in the world market.

Thailand is an eastern developing country that does not use English as its first language, the first international programme was launched in 1967 (the Ministry of University Affairs: MUA[1], 1998). However, since then it has started offering more international higher education programmes and has been looking for potential markets particularly after the Asian crisis in 1997 (DEP, 2002a). However, as a new country offering international higher education service when compared to Australia, Thailand still lacks experience offering it in the world market. Further, Thailand lacks research related to this area. This may result in Thailand and its HEIs having insufficient information for

[1] Known as Commission on Higher Education, the Ministry of Education after the national education organisation reform in July, 2003.

providing a good and appropriate international higher education service for students who come from across the world. Therefore, learning from a leading country, like Australia, which has more experience, may be an appropriate way to begin.

Over the period 1976 to 2003, there has been only one project that involved an investigation of the factors affecting international students in choosing Thailand as their study destination (DEP, 2002b). Meanwhile, more than twenty-five such projects have been undertaken in Australia (See appendix 1). Thus, despite the first international programme being offered in 1967, Thailand is still in the early stages of offering international higher education service to students across the world. Therefore, information from Australia as a country which has had a long experience of, and excellent performance in, offering an international higher education service to the world would be useful for Thailand. Information and research results about Australia's international higher education service would be able to help this study in contributing new knowledge to assist the international higher education service of Thailand. Further, the different factors affecting international students for their choice of study destination and their experiences after their enrolment in particular in HEIs in Australia as an English-speaking destination country and in Thailand as a non English-speaking destination country needed to be compared to enable identification of those that differentiate Thailand from Australia in offering an international higher education service. Due to lack of research in this area in Thailand, opinion from persons involved with international higher education in Thailand will be also explored by using Australia's experience as the guideline for the study. It is expected that the results of this study will be useful for Thailand and its HEIs in offering and marketing the international higher education service to students across the word in the future

1.3 Australia and Thailand: Countries for Study Abroad

This study focuses on the international higher education service in i) Australia as one of leaders in offering an international higher education service and ii) Thailand as a new non English-speaking study destination offering international higher education service to

the world market. The results of the study and Australia's experiences in the international higher education will be used to provide directions for Thailand in offering and marketing its international higher education service.

1.3.1 Australia: One of the Leaders in Offering an International Higher Education Service

The international education service in Australia started with an education aid programme for international students from developing countries through the Colombo Plan in 1950 (Wick, 1972). Now, the international education policy in Australia has changed from "aid" to "trade" since the new international students policy was announced in 1985 (Nesdale et al., 1995). Once the new policy was released, HEIs in Australia and the Australian government started promoting the international higher education service. Gallagher (2002) stated that over the period 1985 to 2005 purchasing by students of Australia's international education service and trade in education service among nations, became increasingly commercialized and competitive. Many activities in introducing this service, for example education exhibitions, have been used to approach international students in target countries.

An early, Bureau Industry Economics': BIE (1989) survey conducted in Australia with overseas students (in conjunction with other published material) revealed that the average spending, that is education fee plus living cost by a full fee paying international student in 1987 was valued at approximately $AUD14,000 a year. In this report, it was also estimated that the foreign exchange earning from higher education service would have been approximately $AUD120 million in 1987. It was supported by Industry Commission research in 1991, which listed the benefits to the host country coming from the revenue of institutions and international students' living expenses. A more recent report on a study of the cost of higher education for international students in 2004 revealed that the cost of living for an international student was valued around $US9,519 per annum and education fees varied between $US10,031 and $US19,346 per annum (Follari and Pearce, 2004) depending on level and area of the study. Australia gained

approximately $AUD 3.72 billion in 2000 from the international education service (all levels), and revenue in 2003 was expected to increase to $AUD 4.20 billion (IDP, 2003d). Global demand for international education service in Australia is still forecast to increase with Australia's share rising from 3% in 2000 to 8% in 2025 (Bohm et al., 2002). This revenue from international higher education service contributes greatly to the Australian economy.

1.3.2 Thailand: A New Country in Offering an International Higher Education Service

The number of international programmes (delivered in English) offered by HEIs in Thailand has increased significantly since the Asian crisis in 1997 (DEP, 2002a). This has resulted from the Thai government's policy to play a more active and dynamic role in the Asia-Pacific region and the world community. The Commission on Higher Education has given prime importance and continuous support to the enhancement of the quality of international programmes (Office of the National Education Commission: ONEC, 2001; DEP, 2004). Further, this is also an attempt by the Thai government to provide the option for Thai students of remaining to study in Thailand rather than furthering their study abroad (DEP, 2004). The international higher education service is now playing a more important role in Thailand's higher education sector. The Commission of Higher Education has developed collaborative projects with many countries in order to support Thailand in improving the quality of the international higher education service, and to help Thailand attract more international students to study in Thailand (DEP, 2002a; 2004).

In order to satisfy the general admission requirements for undergraduate programmes (bachelor's degree), applicants must complete their upper secondary education or an equivalent to grade 12. For graduate programmes; master's/doctorate degree, applicants must have a bachelor's/master' degree or equivalent. Besides the necessary official documents accompanying an application form, the process may also include examinations and interview (DEP, 2004).

At present, HEIs in Thailand have started to offer international programmes which use English as the medium of instruction for both Thai and foreign students. There are more than 500 international programmes offered by HEIs in Thailand at both undergraduate and graduate levels: 128 bachelors' degree programmes in 70 areas of study in 26 HEIs, 190 masters' degree programmes in 112 areas of study in 26 HEIs and 69 doctoral degree programmes in 32 areas of study in 12 HEIs (Commission on Higher Education, 2003). The number of international students enrolled at HEIs in Thailand has increased by almost 100%, from 2,240 in 2001 (DEP, 2002a) to 4,342 in 2002 and then by a further 13% to 4,962 in 2003 (Matichon, 2003a). These international students (at higher education level) brought at least 2,172 Million Baht in 2002 to the country and it is expected that the revenue would increase to 2,481 Million Baht by the end of 2003 (Matichon, 2003b).

1.4 The International Students' Innovation Decision Process

Both Thailand and Australia consider the international higher education service as an important contribution that can increase the level of their countries' revenue (Industry Commission, 1991; DETYA, 1999; Arambawela and Zuhair, 2003; IDP, 2003a; IDP, 2003d; Matichon, 2003a,b). Therefore, it is crucial to understand the international students' considerations in selecting HEIs and the destination country for their study abroad ((Mazzarol and Hoise, 1996) as well as their experiences after enrolment at the particular HEIs in the destination country.

A model of the International Students' Innovation Decision Process was proposed by adapting the innovation decision process by Rogers (1995), which had been originally proposed in 1962 (Rogers, 1995). The innovation decision process is unique and different from other decision making processes. Rogers (1995) stated that;

> "This process consists of a series of action and choices over time through which an individual (or an organization) evaluates a new idea and decides whether or not to incorporate the innovation into ongoing practice"

and,

> "The perceived newness of an innovation, and uncertainty associated with this newness is a distinctive aspect of innovation decision making, compared to other types of decision making"
>
> (Rogers, 1995, p.161)

This model was chosen because when international students seek out information about study outside their home countries, they are looking for information of "*the new product" (the new country and new study programme in the new HEI),* they have never known before. Therefore, the innovation decision process is applied to this study. This study aims to explore factors affecting international students when making a decision to study outside their home countries and their experiences after their enrolment in particular HEIs in the destination country. Further, this study also aims to find out whether these international students decided to adopt (continue their course of study) or reject (discontinue) their course of study. This process involves a set of choices and actions over time by each international student. Thus, the "International Students' Innovation Decision Process" is a unique decision making process which is appropriate for this study, and to the best of the author's knowledge, no previous research has investigated international students with this model.

1.5 Research Questions and Aims of the Study

In addition to the development of the model of the "International Students' Innovation Decision Process", the background of the international higher education service in Thailand and in Australia needed to be investigated in this study. Subsequently, the findings can be utilized by Thailand and its HEIs in order to attract more international students as Thailand strives to become a centre of education within the Asia Pacific region (DEP, 2000, 2004). The following research questions help form the direction for this study:

1) What are the factors affecing international students in making a decision to study in Thailand/Australia?

2) How do these factors influence each stage in a model of " the International Students' Innovation Decision Process"?
3) What is the international higher education service as perceived by persons who are involved with this service in Thailand/Australia?
4) How can this study be utilised for the enhancement of international higher education service in Thailand/Australia?

and,

The aims of this study are as follow:

1. Identify the factors affecting international students in coming to study at HEIs in Thailand and in Australia (Melbourne).
2. Explore how these factors influence each stage in the model of "International Students' Innovation Decision Process" in offering the international higher education service of Thailand and Australia (Melbourne).
3. Reveal how international higher education service is perceived by persons who are involved with this area in Thailand/Australia (Melbourne).
4. Present the implications of the results of this study with regard to marketing of the international higher education service by Thailand.
5. Propose practical directions for the international higher education service of Thailand by adapting the useful experiences of Australia (Melbourne).

1.6 Significance of the study

Earlier research studies about international higher education service, involving how international students choose their destinations for studying abroad, had focused on factors affecting their decision to study in overseas countries, for example Rao (1976); Goldring Committee (1984); Bureau of Industry Economic: BIE (1989); Kim and Crowley (1989); Stewart and Felicetti (1991); The Industry Commission (1991); Harris and Rhall (1993); Lawley (1993); Smart and Ang (1992, 1993, 1995); Mazzarol (1994, 1998); Mullin, Quintrell and Handcock (1995); Nesdale et al. (1995); Lawley and Blight

(1997); AIEF (1997); Joseph and Joseph (2000); Mazzarol, Choo and Nair (2001); Mazzarol et al.(2001); Pimpa(2001); AEI and IDP (2002); DEP (2002b); AEI (2003a).

To the best of the author's knowledge, there has been no research that has compared the factors affecting international students' choice of study in an English-speaking destination country and in Thailand as a non English-speaking destination country. Therefore, this study aims to develop a new conceptual model of "the International Students' Innovation Decision Process" and identify the factors, which affect each stage of the model. This model contributes to knowledge in the following ways:

- It will offer benefits to the HEIs of Thailand and potentially to non English-speaking countries and their HEIs around the world wishing to attract more international students to undertake international programmes delivered in English through a greater understanding by the HEIs of the international students' innovation decision process.
- It will set the groundwork for further research extending the study both within Thailand and to other developing countries.

It is expected that the results of the research will be helpful for HEIs in Thailand and the MUA in their attempts to attract more international students to study in Thailand. It will provide assistance in their understanding of the needs of international students and how international students make a decision to study at HEIs in Thailand. This study will suggest how Thailand can learn from Australia' s experiences and could achieve the aim of playing a more active and dynamic role in the Asia Pacific region following the Eighth National Higher Education Development Plan, 1997-2001 (MUA, 1998).

1.7 General Definitions Used for this Study

Definitions of the terms used in this thesis are provided in order to clarify their meaning. The general definitions of this study are as follows:

International students (in Melbourne): Overseas students who already finished year 12 or its equivalent and enrolled for any degree qualifications, but excluding overseas students who have enrolled for English Language Intensive Courses for Overseas Students (ELICOS). These overseas students can be either full time, full fee paying or exchange students and be enrolled in any of the seven HEIs that have main campuses in Melbourne.

International students (in Thailand): Overseas students who have already finished year 12 or its equivalent and are enrolled for any degree qualifications in one of the thirty-five universities under the MUA or three autonomous (independent) institutions that offer international higher education programmes (i.e. use English language as a medium of instruction) across the country.

Autonomous (independent) institutions: Institutions that are not controlled by the MUA, and run their own education system as well as all education activities independently.

Higher Education Institutions in Melbourne: Institutions that offer international higher education programmes (i.e. use English language as a medium of instruction) and service to both local and overseas students. Seven universities have their main campuses in Melbourne.

Higher Education Institutions in Thailand: Institutions that offer international higher education programmes (i.e. use English language as a medium of instruction) and service to both local and overseas students. These include thirty-five universities under the MUA and three autonomous (independent) institutions across the country.

Benefits of Study Abroad: Benefits in education and future career that international students expected to gain from their study abroad before they came to the destination country compared to experiences they perceived when they were in the destination country.

Risks of Study Abroad: Risks that international students were concerned that they might encounter before coming to study abroad compared to experiences they perceived when they were in the destination country.

Sources of Information: Personal/impersonal sources that international students used in seeking information for their study abroad, these sources might be important and/or influence them in making a decision for their choice of the destination country and it's HEI

The New Product: the new country and the new study programme in the HEI for international students which they consider for the choice of their study abroad

In addition, abbreviations are used to support the flow of representation, and a list of these abbreviations is available on page xxiii of the thesis.

1.8 The Scope of the Study

This study is an investigation of the international higher education service in Thailand and in Australia (Melbourne) based on two approaches. The first approach was to examine the trend of the international higher education service through the viewpoint of persons involved with the international higher education service in both countries in order to reveal perceptions and opinions of persons who are involved with international higher education in Thailand/Australia (Melbourne). The second approach was to study international students' experiences in making a decision to study abroad in Thailand and in Australia, utilizing the proposed model of "the International Students' Innovation Decision Process".

The study in Australia was limited to Melbourne as one of the best international to centres of excellence and leadership in international education (International Division, Department of Education and Training: DET, 2004) and also owing to geographical, time and budget constraints. In Thailand, the study involved HEIs under the

Commission on Higher Education and autonomous (independent) HEIs that have offered international higher education programmes using the English language as a medium of instruction and the government sectors which are involved with the international higher education service. The investigation in Thailand was conducted across the country because there was only a small number of international students in Thailand.

Nevertheless, the number of participants in Australia and Thailand depended on the permission and cooperation from HEIs and from government departments (in Thailand) which imposed limitation on the sample size. Therefore, in Australia, the study was conducted in four HEIs in Victoria (Melbourne). In Thailand, the study investigated sixteen HEIs under MUA, one autonomous (independent) HEI and one government department which is involved with the international higher education service.

1.9 Thesis Structure

This thesis consists of seven chapters. This first chapter has introduced the research topic, the background, research questions, the scope and significance of the study.

Chapter two presents the literature review on the relevant area of this study. The background of the international higher education service and factors affecting international students in making a decision to study in Australia and in Thailand are presented in this chapter. "The Innovation Decision Process" as a theoretical framework for this study is also introduced and a model of "the International Students' Innovation Decision Process" is proposed as a new conceptual framework of this study.

Chapter three presents the research design and methodology including qualitative and quantitative methods, exploratory research, development of the research instruments, the test of the validity and reliability of the research instruments and ethical considerations. The selection of participants, data collection methods, limitations on the data collection, the data reduction process and the statistical techniques for data analysis are also discussed in this chapter.

bChapter four presents the findings of qualitative research including the presentation of response rate, characteristics of participating HEIs and the results of in-depth interviews with respondents in Australia and Thailand.

Chapter five reports the findings of quantitative research; the response rates, respondents' characteristics and presents how five main groups of factors: sources of information, country characteristic and HEIs characteristics were associated with each stage in "the International Students' Innovation Decision Process"

Chapter six provides a discussion of the qualitative and quantitative findings. The theoretical and practical implications are also discussed in this chapter.

Chapter seven provides conclusions and recommendations of qualitative and quantitative findings. The limitations of the study are discussed and further research is also suggested in this chapter.

1.10 Summary

In this chapter the research topic has been outlined. The research background, research problems, research questions, main area of the study and the significance of the study are discussed. The scope of the thesis, the outline of the thesis presentation, definitions and limitations are described. The next chapter will present the review of literature, as well as the theoretical and conceptual framework for this study.

Chapter 2
Literature Review

2.1 Introduction

This chapter examines the background of the international higher education service as one part of the total international education service in both Australia and Thailand, factors involving international students in selecting their overseas study destination, and an examination of existing studies which have developed strategies aimed at expanding international higher education services. In additon, the concept of innovation and the innovation decision process model as a theoretical framework for this study is introduced. Finally, a model of "the International Students' Innovation Decision Process" is proposed as a new conceptual framework for this study.

2.2 International Higher Education Service in Australia

This section will discuss the significant features of the international higher education service in Australia, the background of the international higher education service in Australia prior to 1985, the Goldring (1984) and the Jackson report (1984), the overseas students policy that was announced in 1985, the impacts of the changes in overseas students policy as well as international education service in Australia after the announcement of the 1985 policy.

2.2.1 The Background of International Higher Education Service in Australia Prior to 1985

The number of overseas students coming from developing countries has increased since the end of the second world war (Jones, 1986). Developed countries, for example, the United States of America, the United Kingdom, and Australia, have recognised the importance of supporting international education for overseas students from developing

countries (Jones, 1986). This phenomenon marked the beginning of an educational aid programme for overseas students (Jones, 1986).

The Australian government has sponsored overseas students to study in Australia through the Colombo Plan since 1950 (Wick, 1972). In 1959, 450 overseas students were supported by the Australian Government's Aid Program: AusAid (Hughes, 1998). In subsequent years, the number of overseas students under the government aid schemes increased to around 1,500 in 1987 and was boosted to approximately 6,000 in 1996 (AusAid, 2001). However, the number of overseas students under the Australian government's overseas aid programme has steadily decreased since 1997. In 2001, the number of overseas students under the government aid schemes dropped to 2,769 (AusAid, 2001) and an estimated number of Australian development scholarship awards commencing in 2005 is 1,038 approximately (AusAid, 2005). This shows the small number of AusAid sponsored students compared to a total of 171,616 overseas students who were enrolled at Australian institutions in 2003-2004 (Department of Immigration and Multiculture and Indigenous Affairs: IMMI, 2005).

In the early years of the programme, there were problems arising from public opinion involving the Australian government's overseas aid programme, firstly that overseas students might threaten local students' opportunities in higher education and secondly that the cost to the Australian government was too high (Hughes, 1998). These were two important problems that the educational aid schemes faced (Hughes, 1998). However, the Australian government was aware of their success and tried to balance educational aid programs with Australia's foreign policy interests (Hughes, 1998; Harris and Jarrett, 1990).

2.2.2 Government Reports on Overseas Students Policy

Three committees were established in 1984 to investigate foreign affairs, overseas students, and the development aid policies of the Commonwealth. The major recommendations on overseas students policy from these committees are presented next.

The Report of the Committee of Review of Private Overseas Students Policy Mutual Advantage, Proposed by Professor John Goldring (1984)

The Goldring Committee was requested to study the benefits of private overseas student programs to Australia. The Committee was asked to make recommendation which would allow for support of private overseas students without decreasing local students' opportunities and without increasing expense to the Australian Government (Goldring Committee, 1984, p.viii). The Committee recommended that educational aid programs for developing countries which included increasing cultural exchange should be continued. The amount of money allocated to aid given to developing countries is based on the revenue from full fee paying overseas student charges (Goldring Committee, 1984, pp.3-8).

The Report of the Committee to Review the Australian Overseas Students Aid Program, Proposed by Sir Gordon Jackson (1984)

The Jackson Committee encouraged the continuation of aid programmes. It was recommended that full fees policy should be introduced to all overseas students in order to achieve the equity and the aims of aid programs. The scholarships should be granted based on a merit system, development criteria and some should be allocated to disadvantaged groups. The recommendations regarding the aid policy were based upon competition and the economic situation. Indeed, the committee saw a demand by overseas students in the Asia Pacific region for studying abroad. The report, therefore, recommended that Australian education should take advantage of this situation by developing a free market for the offering of international education at the level of individual institutions (Jackson Report, 1984, pp. 87-102).

The Report of the Joint Committee on Foreign Affairs and Defense, the Hon W.L. Morrison, MP (Chairman) (1984)

The Morrison Committee compared the Goldring and the Jackson recommendations in devising a new overseas students policy, and proposed their considerations to the Australian government. There were two main features which the Morrison Committee proposed to the Australian government. The Committee recommended that the government increase overseas student charges gradually, in order to reach the level of operating costs identified by the government. The Committee also recommended that the Australian government cut off the parallel development in education aid programme from the aid budget (The Parliament of the Commonwealth of Australia, 1984, pp.240-249).

Each of the above reports considered both full fee payment by overseas students and overseas students under the government aid schemes. These three reports were analysed in order to perform the new policy on overseas students in 1985.

2.2.3 New Overseas Students Policy in 1985

Australia's new educational policy was announced in March 1985. The main points of this policy were:

- Higher education institutions (HEIs) were allowed to charge full fees to private overseas students as of 1 January 1986.
- Institutions could enrol overseas students to make up to 10 percent of their total numbers, and not more than 20 percent in any one course.
- The ceiling number of overseas students was determined by the government.
- An overseas student office was established to be a centre for overseas students and to coordinate with education authorities and institutions. (Industry Commission, 1991)

An objection to the new government policy in phasing out student aid programs and replacing them by the Equity and Merit Scholarship Scheme (EMSS) was that the number of subsidised overseas students would decrease. However, the new policy for accepting full-fee paying overseas students did allow Australian HEIs to enter the global market to offer their international educational service to overseas students (Harris and Jarrett, 1990). These scholarship and equity programmes have been incorporated into Australia's education policy since 1985 (Harris and Jarrett, 1990).

2.2.4 International Higher Education Service in Australia after the Announcement of the New Overseas Student Policy

The new overseas student policy has continued in the form of the Equity and Merit Scholarship Scheme (EMSS) for overseas students, and at the same time, a private overseas students policy has been promoted (Industry Commission, 1991). A change of terminology from 'aid' to 'trade' was debated after the new overseas students policy had released in 1985 (Nesdale et al., 1995).

Government policy plays an important role in international education industry, therefore the Australian government may need to strongly expand the international higher education service in order to increase strengths in offering international higher education programmes. Given the continued importance of the Asian region as a major source of demand for Australia, this may include capitalising on the holistic benefits of international education by expanding a number of portfolios including education, tourism, immigration, trade and foreign affairs. Further, the Australian government may need to attempt to decrease barriers to the development of the international education service for example, by improving the international recognition of Australian qualifications and trying to increase quality assurance for new education institutions in Australia (Bohm et al, 2002; IDP, 2003e).

The number of overseas students in the higher education sector in Australia has grown steadily from 21,112 in 1989 to 174,641 in semester 1, 2003 (IDP, 2003a) and increased

to approximately 188,268 in semester 2, 2005 (IDP, 2006a). The average overseas student annual growth rate in Australia has also increased significantly. Moreover, a survey of international students who commenced study in Australia in 2000 showed that 83% of those in HEIs listed Australia as their first choice when they considered studying abroad, while 9% listed the U.S.A and 4% listed the U.K. Thus, it is evident that Australia has become a popular English speaking destination country for international students when choosing country for study abroad (AEI, 2003a). However, the findings of another survey of Asian students from ten major Asian source countries studying in three major English speaking study destinations revealed that the U.S.A was considered by 70% of Asian students for studying abroad with 49% placing it as first choice, while 51% considered studying in the U.K. with 35% of all students placing it as first choice. Only 38% of these students considered studying in Australia and less than half of them (16%) placing it as first choice (Eduworld, 2001).

Over the period from 1980 – 1987, the average annual growth rate in the number of overseas students was 10.7 percent, compared to only 2.3 percent per annum over the period of 1970 – 1980 (Mazzarol and Hosie, 1996). In 1993, there were only just over 37,000 international students enrolled at universities in Australia, but by 2002 this had grown to over 145,000, an increase of 292% (Tilbrook, 2003). In 2003-2004, the total number of international students who were granted overseas students visa was 171,616; this was an increase of 5.6% compared to the 2002-2003 figure of 162,575 (IMMI, 2005). The following countries were the top three major sources of students with visas granted offshore: China (17,279/ an increase of 21% over the previous programme year), the U.S.A (10,723/ an increase of 2%) and India (9,611/ an increase of 62%) (IMMI, 2005). The total number of international students shows that the trend for the international education (all levels) industry in Australia is that it still has good performance, nevertheless Australia may need to consider some Asian countries from which the number of students is declining.

Poole (1999) noted that the Australian government identified the international higher education service as the most profitable and rapidly growing export industry.

Educational service in 2003 was the third largest service export and the eighth overall export for Australia (Australian Vice-Chancellors in Tilbrook, 2003). In 2003, it contributed more than $AUD 5 billion (Australian Vice-Chancellors in Tilbrook, 2003). and has created about 42,000 jobs for the Australian economy (Connelly, 2002***).*** The international education service in Australia has grown steadily. It was reported at the Gold Coast for the 2005 Australian International Education Conference that this service contributed more than $AUD 7 billion over the previous year to the Australian economy (IDP, 2006b). Benefits of the export of education for Australia have come not only from the revenue of educational institutions but also from international students' expenditure while they study in Australia (Industry Commission, 1991).

2.2.5 Trends in the International Higher Education Service in Australia

The international education service is now a significant industry for Australia (Connelly, 2002; Department of Education and Training: DET, 2004) and it provides significant opportunities for the country (Hall, 2003). In the twenty-first century, education has become more internationalised and globalised (Chen, Caulley and D'Cruz, 2001). The internationalization of higher education has evolved to respond to the change in student demand, economic circumstances and national policy. The international higher education service in Australia has been affected by the following:

- Strong competition among HEIs around the world, for example the United Kingdom, the United States of America, New Zealand, Singapore and Malaysia. These countries have a strong education policy that makes them competitive in the area of international higher education service.
- A free trade market in international higher education service has been introduced as a policy among member countries of the World Trade Organisation (WTO). This has resulted in an expansion of the international higher education network across the world.
- Globalisation of economics, culture and education affect the way an international higher education service is offered

  (Reeve, 2001).

Having observed the above phenomena, it is necessary for HEIs in Australia to develop an effective strategic plan for offering an international higher education service to the world. This plan must be concerned with providing appropriate international higher education activities both offshore and onshore, improving the quality of programmes and service, keeping a market share of existing target countries and also looking for new markets (Reeve, 2001).

Reeve (2001) also stated that international activities, which can contribute to the international higher education dimension includes alliances with other countries in offering the service, staff and student exchange programmes, international research links, establishing campuses outside Australia and participating in development and aid projects. An example of the international cooperation education project is the cooperation in nursing education between Victoria University and HEIs in the Philippines, China, Malaysia, Thailand and Hong Kong (Seedsman and Cheung, 2003). This is a cooperative project under the University Mobility in Asia and the Pacific (UMAP) programme that supports the internationalisation of higher education in the Asia Pacific region.

In the international higher education sector in Australia, a number of trends in international students have been observed. The number of international students from the United States of America, Malaysia and India has grown strongly in recent years. The number of students from the United States of America increased by 25.9% in 2002, Malaysia and China were two important markets, demonstrating an annual student growth rate of 26.8% and 25.1% respectively (IDP, 2003a). International students from India increased by 31.5% after a temporary decrease in late 2001, resulting from the change in overseas students visa regulations. The IDP's report about "Growing International Demand for Australian Higher Education" also showed that the growth rate of international students from the European countries was significantly strong (IDP, 2003a).

The international education service in Australia tends to grow up steadily, IDP's statistical forecasts in the number of international students in Australia shows that the number of international students in Australia will increase from around 99,000 in 2003 to 658,104 by 2025 (Bohm et al., 2002). In Victoria, the IDP's report entitled "International Student Numbers in Victorian University Growing" showed that 51,636 international students (both offshore and onshore) were enrolled in the first semester of 2003 in the state of Victoria (IDP, 2003b). Findings from the research conducted by Eduworld presented three major reasons why international students in Australia chose to study abroad: I) to gain experience of living overseas (28%), II) to gain better quality of education (24%) and III) to improve their English (19%) (Eduworld, 2001). Nonetheless Asian students were less likely to go overseas to broaden their experiences (decreased from 37% in 1997 to 18% in 2000) or because they were unable to secure a place in their home HEIs (decreased from 17% in 1997 to 7% in 2000). This report also revealed that in 2000, 59% of international students in Australia enrolled in business-related subjects and 16% of the students were studying computing-related subject.

Although the world economy has been uncertain and world security and terrorism have been dominant in the media this service still generates revenue for Australia. The income from this service contributed $AUD 3.7 billion to Australia in 2002 (Arambawela and Zuhair, 2003) and it contributed more than $AUD 7 billion in the previous year to the Australian economy (IDP, 2006b). However, competition in this service is increasing from many countries around the world and affecting the annual growth rate of students coming from some existing key Asian countries, for example in 2003-2004, the number of international students from Hong Kong decreased to 5,413 (17% decrease from over the previous programme year), Indonesian students decreased to 5,194 (13% decrease), Korean students decreased to 8,214 (12% decrease), Thailand and Singapore showed a decrease of 10% (4,946 and 3,739) of student visas granted offshore compared to the previous program year (IMMI, 2005). Nevertheless, Asian countries are still major sources of international students for HEIs in Australia, but, even Australia's HEIs have started looking for new markets in offering their service due to uncertain economics and political environments in target countries, which may affect the

revenue of the host country (Australia). The trend of the international higher education service in Australia still looks encouraging in terms of the revenue (Australian Vice-Chancellors in Tilbrook, 2003) and the number of students (IDP, 2003e). However, in order to protect Australian international education industry and its reputation, the Federal and State government have set up the Australian Universities Quality Agency (AUQA) to assess all universities education programmes as well as their international programmes (Chen, Caulley and D'Cruz, 2001). Further, other international higher education activities need to be considered in order to respond to international students' needs. These activities will be related to the factors that international students are concerned about when selecting places for their study abroad.

2.3 The International Higher Education Service in Thailand

Before the latter half of the nineteenth century, education in Thailand was offered by Buddhist monasteries for only a small group of men. In order to transform Thailand into a modern country in 1868, King Chulalongkorn (Rama V) introduced plans to improve the government bureaucracy including the education system of the country, and a centre of higher education was established for Thai people (MUA[1], 1998). Although Thailand has never been colonized, the decision to set up the education programmes and the system itself were influenced heavily by western countries, especially Germany and the U.S.A (Albatch and Selvaratnam, 1989).

2.3.1 Background of International Higher Education Service in Thailand Since 1880s

The development of higher education in Thailand can be divided into three eras: the Early Modernisation era (1889 to 1931); the Post-Revolution era (1932 to 1949); and the Development Planning era (1950 to present) (MUA, 1998).

[1] Known as Commission on Higher Education, the Ministry of Education after the national education organisation reform in July, 2003.

Early Modernisation Era (1889-1931)

Siriraj Hospital, Thailand's first medical school, was founded in 1889. It marked the beginning of Thai higher education. Other institutions were established in this period including the law school in 1897, Civil Service College in 1902 and the Engineering School at Hor Wang in 1913. These institutions aimed to train Thai youth for the expansion of the new government civil service. In 1917, the first Thai university was established by royal mandate, raising the status of the Civil Service College to a university and renaming it Chulalongkorn University. New faculties of Art and Science, Law and Political Science were also added to the existing schools of Engineering and Medicine (MUA, 1998).

Post-Revolution Era (1932-1949)

After the revolution in 1932, the nation adopted parliamentary democracy, which resulted from the changing of a monarchy system to a constitutional monarchy. There was a need to educate government officers, the general public and political leaders on the principles of democracy. Therefore, the University of Moral and Political Science was established in 1933, now known as Thamasat University. In 1943, three more universities were founded: the University of Medical Science (Mahidol University), the Fine Arts University (Silpakorn University) and the Agricultural University (Kasetsart University). The main objective in establishing these universities was to produce specialists for government sectors (MUA, 1998).

Development Planning Era (1950-Onward)

The National Economic and Social Development Board (NESDB) was established in 1950 to commence a modern programme of development planning, which extended over a period of 5-6 years. The first plan was launched in 1961 when planning of educational activities was part of the economic, social, and cultural goals of national development (MUA, 1999). Over the period of the first national economic plan, three regional higher

institutions: Chiang Mai University in the north, Prince of Songkla University in the south, and Khon Kaen University in the northeast were founded over the period 1964-1967. These institutions were founded to encourage necessary programmes to expedite progress towards social and economic development (Commission on Higher Education, 1998). The Development Planning era has seen a major change in, and expansion of, higher education in Thailand. One of the most important developments that took place over the period of the late 1960s to the late 1970s is that HEIs in Thailand started offering international programmes delivered in English to both local and foreign students. There are 18 public, 19 private HEIs (DEP, 2005) and 2 autonomous HEIs (MUA, 2001) in Thailand offering international programmes using English as the medium of instruction.

2.3.2 The Development of the International Higher Education Service in Thailand after the Period of the Late 1960s

The Asian Institute of Technology (AIT) was opened in 1967 as the first autonomous international graduate school in Thailand (MUA, 1998). The AIT has offered international programmes, delivering science and engineering courses delivered in English for students from Asian and other countries since 1967. In addition, Assumption University was established in 1969 to offer international programs (MUA, 1998). During the 1980s-1990s, several other state and private universities began to offer international programs for both Thai and international students. For example, the International College of Mahidol University was founded in 1985 to offer international programmes for Thai and international students (Mahidol University, 2000). Similarly, Bangkok University International College (BUIC) has provided both local and international students with the opportunity to study in different schools. BUIC has also provided an ‘International Exchange Program’ to send local students to study abroad and for international students to study at BUIC (Bangkok University, 2000).

2.3.3 The Current International Higher Education Service in Thailand

In order to allow Thailand to develop a more active and dynamic role in the Asia Pacific region and the world community, MUA has continued to maintain the quality of programs offered to international students (MUA, 1998). The Ministry of University Affairs initiated the first long-term plan for Thailand's higher education development, spanning a period of 15 years, 1990-2004 (MUA, 1999). The plan focused on five major areas: equity, efficiency, excellence, privatisation and internationalisation (MUA, 1999). Furthermore, to increase the experience and expertise in internationalisation, Thai HEIs have worked closely with many HEIs in countries around the world such as Australia, Japan, Canada, Germany, the U.S.A and the U.K (MUA, 1999).

International Higher Education Programmes and International Collaboration in Thailand

Recently more HEIs in Thailand have started to offer international programmes using English as the medium of instruction for both Thai and foreign students. In 2005, there are more than 500 international programmes offered by HEIs in Thailand at both undergraduate and graduate levels: 128 bachelors' degree programmes in 70 areas of study in 26 HEIs, 190 masters' degree programmes in 112 areas of study in 26 HEIs and 69 doctoral degree programmes in 32 areas of study in 12 HEIs (DEP, 2005).

Collaboration with other countries and with international organisations has significantly supported the development of Thai education (ONEC, 2001). Owing to the importance of internationalisation of higher education, international collaborative education among countries and international education networks are highly necessary. The MUA has initiated international collaborative projects with other countries, which can help to improve the quality of international higher education in Thailand. These projects have been created to promote international education programmes offered by HEIs and to support staff and student exchange programmes with HEIs in other countries. They can

help HEIs develop international programmes that meet international standards. The most significant of the MUA current projects are as followed:

ASEAN University Network (AUN)

AUN is the network conducted by the Association of South East Asian Nations (ASEAN) which focuses on cooperation in promoting the exchange of staff and students including the exchange of education resources among members.

Information Seminar and Exhibition

The main objective of this project is to build closer ties with neighboring countries in order to improve the quality of education in he region. The project, consisting of information seminars and exhibitions was initiated in Vietnam in 1999. Similar activities were also planned to cover all countries in the Greater Mekong Sub-region (GMS) which includes Cambodia, Laos, Myanmar, Southern China (Yunan Province) and Thailand.

Area Studies Centres Project

This project is designed to support HEIs in setting up a centre of education and promoting Thailand's HEIs to other countries as well as planning policies for international cooperation.

Thai University Administrators Shadowing (TUAS) Programme

This programme is for HEI administrators to connect with HEIs in other countries in order to learn about academic experiences in international environments. Australia, Canada, France and the United Kingdom are countries that participate in this project.

Students and HEIs Staff Exchange Programme

This programme is an attempt by the MUA to encourage HEIs to exchange staff and students with other countries, the " Mobility in the Greater Mekong Sub-region (GMS)" and "University Mobility in Asia and the Pacific (UMAP)" are two projects that will

lead HEIs in Thailand to achieve international academic standards and to improve human resources through broadened international vision (ONEC, 2001).

2.3.4 Trends and Policies of International Higher Education Service in Thailand

A policy for service businesses development in Thailand was announced by the prime minister, Taksin Shinnawatra, in 2001. This policy aims to improve services businesses in Thailand, such as tourism, healthcare, medical treatment, sport recreation and the education service. The international higher education service has been expected to be a resource of revenue increment to the country (Thaitieng, 2001). The Board of Investment of Thailand (BOI) identified education investment as a particularly important service. In addition, educational free trade under the General Agreement on Trade and Services (GATS) has led to high competition in the international education service in Thailand (Thaitieng, 2001).

A paper on the topic of "International Education of Thailand: the New Dimension of National Revenue" presented at a seminar workshop held on 7th February 2002 highlighted two main issues for consideration in the future planning of international higher education service in Thailand. They were support from the government and private sectors and strategies for the international higher education service in Thailand (DEP, 2002a).

2.3.4.1 Support from the Government and Private Sectors

The international higher education service in Thailand needs the support of both the government and private sectors in order to compete in the world market. An increase in investment in the higher education service by both foreign and local investors is necessary to expand the service. However, the report on "policies and strategies for international educational promotion of Thailand" also pointed out that external investors should be controlled by limiting the number of service providers and the number of programmes (DEP, 2002a). The report also indicated that the number of local (Thai)

students who wish to study abroad should be decreased by introducing advantages for studying in their home country (Thaitieng, 2001). To achieve these aims, the government needs to provide a good environment, good infrastructure and security of living in Thailand for both local and international students (Thaitieng, 2001).

2.3.4.2 Strategies for the International Higher Education Service in Thailand

In order to be successful in this service, some strategies were suggested that HEIs in Thailand need to provide good quality international programmes, good services and excellent educational resources for international students (Thaitieng, 2001). Alliances and an international network are also important for improving the international higher education service in the future. The Thai government needs to reconsider some regulations, which affect international higher education management, for example educational equipment tax, student visas, immigration, custom processes and system of exemptions/credit transfer processes. Finally, marketing promotion was suggested as the primary way to transmit information about Thailand's international higher education service to prospective international students (Thaitieng, 2001).

The seminar workshop held on 7th February 2002 on the topic of "International Education of Thailand: the New Dimension of National Revenue" and the seminar held on 5-6 February 2005 on the topic of "Competitive Advantages of Studying International Programmes in Thailand" both maintained a focus on policies and strategies that followed from the results of the seminar held in 2001, which was arranged by ONEC. Target countries, competitors and problems in offering international higher education services in Thailand were discussed in these workshops (DEP, 2002a, DEP, 2005).

The major target market for the Thailand's international higher education service will be Asian countries, for example China, Taiwan, India, Japan and Indo-Chinese countries. The minor target markets consist of Russia, Africa and the Middle East (DEP, 2002a, DEP, 2005). Some of the problems in offering an international higher education service

in Thailand were also discussed. Firstly, Thailand does not portray an image as a study abroad destination. Secondly, the essential facilities, such as accommodation and academic resources in some HEIs were not ready to serve international students. Thirdly, staff recruitment was a major challenge because it has bee n difficult to recruit good quality lecturers. Fourthly, the English language is not the first language for education in Thailand and this has become a weakness of Thailand's international higher education service. Finally, Thailand still does not have the appropriate sources of information to promote the international higher education service (DEP, 2002a).

In order to resolve these problems, some suggestions were discussed, for example establishing a committee to manage the international higher education service, intensifying the campaign to promote the international higher education service of Thailand and setting up an individual organization (similar to IDP in Australia) as a resource for promoting Thailand's international higher education service (DEP, 2002a). However, several competitive advantages of the international higher education service in Thailand as a destination country for study abroad were highlighted in this seminar. These include a low cost of living, political stability and high technology of academic resources (DEP, 2002a). Although Thailand is still new in this area, policies of both government and HEIs show that Thailand has a strong resolve to achieve a world-class standard for its international higher education.

Over the period between 1995 to 2001, the number of Thai HEIs offering international programmes increased significantly from 15 institutions in 1995 to 37 institutions in 2001 (MUA, 2001). The DEP has been attempting to increase the intake of new international students in Thai HEIs by 30 percent per annum (Sakulthai, 2001).The cost for each foreign student, who enrols in Thai HEI is approximately 500,000 Baht per year (tuition fees plus living cost). Recognising the amount of revenue that can be generated from these expenses for the nation, the Thai government has endeavored to promote higher education to new prospective students in target countries, for example Indo-Chinese countries. Education exhibitions in neighboring countries have taken place such as the one held in Vietnam in May 2001 (Matichon, 2001). The number of

international students enroled at HEIs in Thailand has increased significantly from 2,240 in 2001 (DEP, 2002a) to 4,962 in 2003 (Matichon, 2003a). The top five home countries of these international students were China, Vietnam, Myanmar, India and Japan (Matichon 2002). These international students have contributed approximately 2,172 million Baht per year to the Thai economy and it was expected that the revenue would increase to 2,484 million Baht at the end of 2003 (Matichon, 2003a).

Although the international higher education service offered by HEIs in Thailand has grown significantly in terms of both the number of programmes and the number of international students, Thailand still needs to learn much to deliver this service. However, lack of information, research and knowledge in this area causes Thailand and its institutions to offer international programmes without appropriate directions. In order to provide appropriate strategies in offering a world-class service, learning from Australia's experiences may help HEIs in Thailand in better managing the international education service for international students.

2.4 Strategies to Expand the International Higher Educational Service

In this section strategies for offering the international higher education service based on Australia's experience as one of the leaders in this business are discussed. These may be useful for new countries such as Thailand in the development of appropriate strategies for offering the international higher education service in the future.

With the high level of competition between institutions in both Australia and in Thailand, competitive advantage is an issue of concern for all institutions. The substantial expansion of international higher education around the world is the main reason why institutions should consider the quality of their services. Interaction between service organizations and their clients is identified as the key to service delivery (Oldfield and Baron, 2000). Lovelock (1991) stated that service is intangible. He identified education as an intangible which acts directly through people's minds.

Furthermore, education is also described as a service which is delivered from person to person (Czepiel et al., 1985).

Mazzarol and Hosie (1996) suggested that, in order to develop marketing strategies for education services, it is necessary to understand the specific characteristics which distinguish them from tangible products. Planning appropriate marketing strategies for higher education institutions is a complicated task. The provision of education involves a type of service which is difficult to present to the prospective target, especially in offering an international higher education service to international students. Education institutions need to prepare the right strategies in order to reach their target groups. Thus, it is very necessary for each institution to provide adequate information to international students.

In order to expand an international higher education service, some unique strategies need to be provided. Several studies undertaken in the period 1980s-2000s recommended marketing strategies, which were appropriate to international higher education service (Nicholls 1987; Murphy 1987; Mazzarol 1998; Smart 1988; Mazzarol and Hosie 1996; Mazzarol 1998; Joseph and Joseph 2000).

2.4.1 Going Offshore

The change in overseas higher education policy from aid to trade was one of the reasons to develop effective marketing strategies for educational services offered by Australia. Offshore higher education is part of these marketing strategies. It involves the delivery of programmes to international students in other countries (Nicholls, 1987). Research carried out in Hong Kong by Murphy (1987) revealed that some Australian education institutions had set up education networks to Hong Kong and some seemed to have a plan to expand their service. Nevertheless, educational resources are required in offering offshore education. There need to be library resources and scientific instruments available of the appropriate standard and in sufficient quantities for the number of students (Nicholls, 1987). Nicholls also suggested that local teaching staff should have

similar qualifications and experiences to the Australian staff. However, the standard of offshore education is at risk because there is an economic requirement to increase income (Nicholls, 1987). The government policies of target countries before offering offshore programmes should be considered because it involves local people's opinion and the government policies of those countries (Murphy, 1987). Going offshore was one of strategies to expand international education to other countries which was supported by Mazzarol and Hosie (1996), Mazzarol (1998), Barnes and Phillips (2000), Olsen (2001), Reeve (2001), Selby (2001),Turpin (2005). There are a few interesting solutions that should be addressed as follows:

2.4.1.1 Establishing Campuses in Other Countries

Another solution for HEIs is to establish their own offices in prospective countries in order to manage courses and provide education resources to support their students (Nicholls, 1987). Joseph and Joseph (2000) suggested that going offshore in order to obtain a broader share of the education market is a particular strategy chosen by Australian institutions. Offshore recruitment and offshore teaching programmes could offer competitive advantages to institutions in dealing with international students (Mazzarol, 1998). In addition, establishment of cross-border campuses was suggested by Turpin (2005) as one option to deliver higher education to East and South East Asia.

2.4.1.2 Strategic Alliances/Partnership

Penetration of the international target market is a difficult task for educational institutions. There are many critical factors, such as culture, politics and economics including government policy (Murphy, 1987). These are also risks in the expansion of the educational service, hence the formation of strategic alliances is a strategy that should be considered (Nicholls, 1987).

Building strategic alliances with institutions or organisations in other countries is an important technique for institutions to use in an effort to reduce risks (Nicholls, 1987).

Mazzarol and Hoise (1996) supported this idea. They claimed that the ability to reinforce strategic alliances with overseas institutions will most likely lead to an important competitive advantage for Australian higher education institutions in the future. Similarly, Mazzarol (1998) recommended that strategic alliances could be a competitive advantage in the education service. He also stated that the basic benefit of strategic alliances is the ability to reach "economies of scale" in distribution of information to target groups, and this may reduce risks in offering the programmes. Strategic alliance/partnership was also supported by Barnes and Phillips (2000), Olsen (2001), Reeve (2001) and Selby (2001) as one of successful strategies to approach international students. Barnes and Phillips (2000, p.189) said that "partnership working between HEIs and other organizations offers significant opportunities for "adding value" in the environment sector and for promoting sustainability.

2.4.1.3 Twinning Programmes

The establishment of twinning programmes is another strategy which higher education institutions use to expand their service (Nicholls, 1987; Smart, 1988, DEP, 2002a). The basis of twinning programmes is that students study in their own country for the first one or two years. Then, they travel to a country, with which their institution has a contract, for the final stage of their study. Students may receive a degree from both countries depending on the institutions' agreement (Nicholls, 1987; Smart, 1988).

2.4.2 Appropriate Promotion through Appropriate Communication Channels

Promotion planning for the international education service is a delicate task for HEIs. They have to be careful in their communications to prospective students. In addition they should neither be too aggressive nor too passive. However, since the number of international programmes offered by various countries has increased in the last decade, marketing promotion for the educational service remains a very important task for institutions in attracting more international students to come and study in their institutions. Mazzarol and Hoise (1996) claimed that promotion of the international

education service was essential to increase the available information to prospective international students.

In the last two decades, different promotion strategies like improving new contemporary international programmes, using appropriate communication channels for example, private agents, education exhibitions and word of mouth communication to send information to prospective international students have been suggested by academics. In the 21st century, high technology communication channels such as the internet tend to be popular to contact prospective international students (Joseph and Joseph, 2000; Eduworld, 2001; AEI, 2003b; Harris, 2004). Some of these strategies may be useful for HEIs both in Thailand and Australia in order to create suitable promotion channels to reach their prospective students in the future. Specifically, Thailand's HEIs may learn from the previous experiences of Australian institutions in order to improve their strategies in offering programmes to prospective international students.

2.5 Factors Affecting International Students when Making a Decision to Study Abroad

In order to introduce a new product/service, it is important for product/service providers to understand consumers' needs and give assistance to develop a product/service to meet their needs (Zaltman and Wallendorf, 1979). Therefore, in understanding international students' needs when making a decision for their study abroad, five groups of factors (HEIs characteristics, country characteristics, sources of information, benefits and risks) have been identified from previous research reported in the literature as a framework for this study. These factors are tested through the model of "the International Students' Innovation Decision Process" based upon the conceptual model of "the Innovation Decision Process" developed by Rogers (1995).

Many developed countries, including Australia, have considered the international higher education service as a revenue generating service (Industry Commission, 1991; DETYA, 1999; Arambawela and Zuhair, 2003; IDP, 2003a). Although Thailand is a developing

country, the Thai government and HEIs in Thailand believe that they have enough potential to offer this service, especially to some particular countries such as Indo-Chinese countries and China. However, making a decision to study in an overseas country is a huge investment, not only in terms of money but also in time. Before making a decision to study abroad, international students seek out information about HEIs and the countries that offer this service from a wide range of sources (Mazzarol and Hosie, 1996). Therefore, it is necessary for host countries and HEIs in those countries to understand the particular factors and the sources of information which influence international students in making their decision to study abroad. The key for approaching international students, who wish to study abroad, is in understanding the factors which relate to their decision making (Mazzarol and Hosie, 1996).

Factors affecting international students' choice of study abroad are discussed in this section. These factors have been assembled from existing studies, especially in Australia, which have involved surveys of international students, surveys of experts who are involved with international students and studies relevant to international education service (at all levels).

Five main groups of critical factors that assist in understanding why international students have decided to study in Australia and Thailand have been identified from the literature. These are higher education characteristics, country characteristics, sources of information and benefits and risks of study abroad. The summary of key reference about these factors is provide in Appendix 1 and they are discussed in more detail in sub sections 2.5.1 to 2.5.5.

2.5.1 Sources of Information

The sources of information included in this study from which international students seek out information for study abroad have been identified in the literature. Sources of information not only give information about study abroad but also may influence them in making a decision to enrol at HEIs in a destination country. The sources of

information discussed in this section as a group of factors affecting international students for choice of study abroad include family, friends and relatives, private agents, Australian Education Centres (AECs), education exhibitions and other sources such as newspapers, magazines and the internet (HEI's websites).

Family (parents and relatives) and Friends

The results of a survey conducted by Rao (1976) showed that family members and friends affect international students in choosing where they study overseas. The influence of friends and relatives was cited by international students as one of the main reasons for choosing to study in Australia (Goldring, 1984). Similarly, the results of a survey conducted with international students by Bureau of Industry Economics: BIE (1989) found that the influence of parents and relatives was a significant part of the reason for international students choosing Australia for their study. The survey results with ELICOS' students in Western Australia by Kim and Crowley (1989) showed that family and friends were two of the important sources of information for Australian education. The survey conducted with international students at Clarion University in Western Pennsylvania by Stewart and Felicetti (1991) indicated that influence of friends was a factor affecting them to choose the place for their study abroad.

The results of a survey conducted in Singapore, Hong Kong and Taiwan by Smart and Ang (1992, 1993) also confirmed that the findings of the above previous studies that information from acquaintances, for example friends and relatives who had studied or had experiences overseas were significant sources of information influencing the choice of a destination country. Smart and Ang (1992) stated that these people provided word of mouth information which helped in creating knowledge about HEIs in other countries for prospective students. They also claimed that "favorable word-of-mouth impressions generally led to positive evaluation and selection of the destination" (Smart and Ang, 1992, p.31).

A survey of international students in Australia undertaken by Harris and Rhall (1993) supported the proposition that friends and relatives were two main sources of information for University students. This was supported by AIEF (1997) that relatives and friends affected international students at higher education level in making a decision to study in Australia. In addition, a study conducted by Lawley (1993) in Hong Kong showed that family and friends were important sources of information for international students in selecting a place for study abroad. This was supported by the results of a survey conducted with local and international students in three south Australian universities by Mullins, Quintrell and Hancock (1995) which showed that friends and relatives affect international students in choosing where they study overseas.

A research paper presented by Lawley and Blight (1997) about international students' intentions and their choice of study abroad revealed that opinions of family members was one of the most important factors for Thai students when making a choice for their study abroad. Recommendations from parents, relatives and friends who are already studying in destination countries was also found to be a factor influencing Indian and Chinese students when choosing a place for study abroad (Mazzarol, Choo and Nair, 2001; Mazzarol et al., 2001). Findings from a survey of Asian students in English study destinations in 2000 undertaken by Eduworld (2001), revealed that a reference group, particularly the family, most influenced their choice of HEIs. An exploratory study by Coleman (2004) in Middle Eastern countries supported that the recommendation/opinion of family was very important for Arabs and Iranians. A big proportion of students in all destinations (61%) were influenced by their parents, relatives or friends and the most powerful source was their parents (32%). In Australia, the majority of students (59%) were influenced by parents and relatives and friends: the most powerful influence being parents (27%) while 36% made a decision by themselves (Eduworld, 2001).

Furthermore, the findings of a survey of international students in Australia conducted AEI (2003b) also confirmed that friends at home, family and people who had studied in Australia were important sources that convinced them in making a decision for choosing Australia as the destination country for their study.

It is evident that family, friends and relatives are good sources of information for students. They can use "word-of-mouth communication" to convince prospective students in making their decision to study abroad. Word of mouth referral is one of the most successful channels of sending information about an institution to international students. (Hill and Neely, 1988). This was also supported by a survey of Eduworld (2001) on the topic of "ASIAN STUDENT of 2000: Choice Factors and Influences of Asian Undergraduates studying overseas".

Independent Agents

The results of the survey of ELICOS' students in Western Australia by Kim and Crowley (1989) showed that agents were an important source from which international students obtained information about Australian education. Smart and Ang (1993) recommended that private agents can offer a variety of services to international students who are seeking information about study abroad. They stated that commercial agents were key intermediaries for the recruitment of international students. They also undertook projects in Singapore in 1992 and in Taiwan in 1995, the results of which showed that professional agents were essential in the recruitment of students for study overseas. The results of the survey undertaken by Harris and Rhall (1993) about international students in Australia showed that one of the main sources of information for international students who came to study in Australia was private agents. A research study conducted by Pimpa (2001) revealed that education agencies constitute the strongest factor influencing international students (Thai) in making a decision to study in Australia. This was also supported by the survey of international students who commenced study in Australia in 2000 conducted by AEI (2003b). The results of research undertaken by Eduworld (2001) revealed that almost two-thirds (60%) of international students in Australia had contacted education agents and tended to be satisfied with the agent's assistance, while only a small proportion of students in the U.K (15%) and in the U.S.A (10%) had contacted with private agents. Further, recommendation from private agents was also one of the factors influencing Indian and

Chinese students when choosing a place for study abroad (Mazzarol, Choo and Nair, 2001; Mazzarol et al., 2001).

In Australia, IDP is a large private agent for Australia's international education organisation that provides student recruitment service for Australia's universities (Back, 1989). IDP is an independent, not-for-profit organisation, founded as a cooperative of 38 Australian universities. In 2003, IDP had offices in more than 90 locations around the world (IDP, 2003c). IDP is a global private agent for Australian HEIs in providing information and recruiting international students from their own countries.

Australian Education Centres (AECs)

AECs were established by IDP and subsequently sold to the Australian Commonwealth Government in order to provide general information, assistance for visa applications and general promotion of Australian education to prospective students in their home countries (Industry Commission, 1991). AECs are operated by Australian Education International: AEI. They are an information centres that provide general advice to students who wish to study in Australia. All Australian institutions that are registered in the CRICOS (Commonwealth Register of Institutions and Courses for Overseas Students) can place their promotional materials with the AECs without any charge (AEI, 2003a). The survey conducted by Harris and Rhall (1993) showed that AECs constituted one of the sources of information that university students used to seek out information for their study in Australia. Furthermore, findings of a survey conducted by AEI (2003b) also show that information from AECs was one of the important sources of information for international students before making a decision for their study abroad in Australia.

Education Exhibitions

A survey of international students in Australia undertaken by Harris and Rhall (1993) showed that trade exhibitions constituted one of the main sources university students used to seek out information for their study in Australia. The investigation done with

persons involved in international higher education service by Smart and Ang (1992, 1993) in Singapore and in Hong Kong revealed that educational exhibitions were the initial points of the first communication with prospective students and parents for HEIs. This was also supported by the results of their survey with international higher education service professionals in Taiwan, 1995. They recommended that educational institutions should ensure good preparation for seminars at exhibitions and organise for recruitment including interviewing of students by staff who could make decisions on the spot to accept students (Smart and Ang, 1992, 1993, 1995). This was confirmed by research undertaken by AEI (2003b) that education exhibitions constituted one of the important sources which international students used in seeking information for their study in Australia. Education exhibitions as a source of information was also supported by a survey of 81 international students form 22 different countries during a session of the Orientation week in second semester 2004 as one of the important sources they used in seeking information to study in Australia (Harris, 2004). However, the research conducted with persons involved in the international education service by Mazzarol (1994) argued that there was little agreement about the value of educational fairs and exhibitions by almost 70% of the sample.

Other Sources of Information

Direct promotion by HEIs in Australia and information from newspapers/magazines were identified as two main sources of information for university students in seeking out information about study in Australia (Harris and Rhall, 1993). Findings from a survey of Asian students in 2000 showed that course guide from universities were an important source used by undergraduate students in seeking information for their study abroad (Eduworld, 2001).

The Internet as a source of information was becoming popular for Indonesian students in seeking information for study in HEIs in New Zealand (Joseph and Joseph, 2000). This was also confirmed by results of research with international students who commenced study in Australia in 2000 undertaken by AEI (2003b). This was supported by the

finding of a survey of 81 international students from 22 different countries during a session of Orientation week in second semester 2004 at the University of Canberra (Harris, 2004). It was also confirmed by Blight and Archer (2005) that the internet (university website) is in the second rank (12% from 20 sources identified) of sources of information to help international students made a decision to choose the University for their study abroad, however seeking information from the internet (commercial website) seems less powerful for them. The internet has now become a more powerful education search and delivery tool for students in seeking information for studying abroad (Eduworld, 2001). However, it is interesting that the results from the survey conducted by Eduworld (2001) revealed that students in Australia were less likely to use the internet as an information source (only 10%) when choosing an overseas institution.

2.5.2 HEIs Characteristics

HEIs characteristics have been identified as a group of factors affecting international students in making a decision about their study abroad destinations. They include cost of study (tuition fees), reputation of HEIs, recognition of qualification, standard of course and programmes, wide range of courses and programmes, HEI facilities for international students, scholarships and financial aid for international students, completion time of study, counselling services and system of exemptions.

Cost of Study (tuition fees)

The majority of previous studies have identified the cost of study fees as one of the significant components of "total cost" affecting international students in making a decision to study abroad (Goldring, 1984; BIE, 1989; Kim and Crowley, 1989; DEET, 1994; Back, Davis and Olsen, 1997; Smart and Ang, 1992, 1993; Lawley and Blight, 1997; AIEF, 1998; Eduworld, 2001; Mazzarol et al., 2001; Mazzarol, Choo and Nair, 2001; AEI and IDP, 2002; DEP, 2002b; AEI, 2003b; IDP, 2003e,f; Coleman, 2004). Findings of a research study (online survey) conducted by IDP (2003e) with international students from a wide range of regions and nationalities, involving students'

perceptions of major English speaking study destination countries revealed that for students' perceptions, the overall cost of study scored 6.8 out of 10, lower than the U.K. (8.7) and the U.S.A (8.1) but it was considered more expensive than New Zealand (on a scale where 1 was defined as being lower cost, 10 being higher cost).

In this study, the cost of study (tuition fees) has been placed in the group of HEIs characteristics while the cost of living has been placed in the group of country characteristics. Therefore, in this section only the cost of study (tuition fees) component will be discussed.

Mazzarol, Choo and Nair (2001) carried out a survey with Indian students who chose to study in countries other than Australia. They found that lower tuition fees for education was identified by 35% of Indian students as one of the factors influencing study destination choice of postgraduate students. Similarly, Mazzarol et al., (2001) conducted a survey in order to understand how Chinese students select a country for study abroad. They found that lower tuition fees for education courses was a factor considered by 47% of respondents in the selection of the study destination.

A study conducted by Back, Davis and Olsen (1997) of the comparative cost of higher education courses for international students in Australia, New Zealand, the United Kingdom, Canada and the United States of America showed that the cost of study (tuition fees) is a factor that international students considered when making a choice for study in other countries. However, these authors stated that the cost of programmes would be compared to the length of programmes and the cost of living in host countries when international students make a final decision. Affordable tuition fees were still considered by international students as one of the most influencing factors for them in choosing the place for their study in Australia (AEI, 2003b; IDP, 2003e). The results of a survey involving HEIs in Thailand shows that cost of study (tuition fees) at HEIs in Thailand was lower when compared to other destination countries that offer courses delivered in English, for example Australia and New Zealand, and it was found to be a strong factor in attracting international students for choosing to study in HEIs in

Thailand (DEP, 2002b). The findings of a survey of Asian students in 2000 conducted by Eduworld (2001) showed that cost of study in a destination country was an important factor for students' choice of destination, especially for Thai and Indonesian students. Nevertheless, although cost of tuition fees was mentioned as a particularly important factor for some Asian students, only a small percentage of students actually selected an institution based only on cost, this indicated that students would be willing to pay more for good quality of education (Eduworld, 2001).

Reputation of HEIs

The study conducted by Smart and Ang (1992) in Singapore revealed that reputation of HEIs was a factor that affected international students and their parents in selecting a place for study abroad. This factor was also supported by the results of a survey with international students conducted by BIE (1989) as one of the reasons that international students came to study in Australia. A project carried out by the Bureau of Immigration, Multiculture and Population Research to investigate the experiences and perception of international students in Australian universities has shown that 60% of international students come to study in Australia due to an institution's reputation (Nesdale et al., 1995). The survey carried out by Mullins, Quintrell and Hancock (1995) showed that reputation of HEIs was one of the factors influencing international students' choice of study destination. Good reputation of Australia' s HEIs was one of the reasons for international students at the higher education level to come to study in Australia (AIEF, 1997).

An HEI's reputation was suggested as a factor that affects the attitudes of international students when they select an institution for their study overseas (Mazzarol, 1998). This was supported by a result of a survey with Asian postgraduate students conducted by Eduworld in 2000 (2001). Mazzarol, Choo and Nair (2001) conducted a survey with Indian students who did not choose Australia as their destination country. They found that the reputation of HEIs influenced the study destination choice of 96% of Indian postgraduate students. The survey conducted in China by Mazzarol et al. (2001) showed

that the reputation of HEIs was considered by 58% of respondents when making a decision to study abroad. This was also confirmed by findings of a survey undertaken by Eduworld (2001) that revealed that reputation of the university was one of the most important factors that Asian students considered when choosing a place to study abroad and it was the reason why they finally chose their institutions

Recognition of qualification

The results of a survey of New South Wales University graduates who had studied in Australia as international students and had returned to their home countries showed that their Australian qualification was recognised in their home countries (Gardiner and Hirst, 1990). Smart and Ang (1992) conducted a study in Singapore and found that one of the factors that was considered by Singaporean students and their parents was the recognition of the degree. Similarly, recognition of qualifications was also an important factor for Hong Kong and Taiwanese students and their parents in choosing a destination for study abroad (Smart and Ang, 1993, 1995).

Recognition of qualifications has also been identified as one of the factors affecting Hong Kong students when making a decision to study abroad (Lawley, 1993). Similarly, a research paper presented by Lawley and Blight (1997) about destination choice by international students when making a decision for their studies abroad indicate that recognition of qualifications was one of the important factors affecting Malaysian, Thai and Indian students in selecting a place to study in overseas countries and this is also true for Middle Eastern students (Coleman, 2004).

Findings of the survey carried out in India with Indian students who did not choose Australia as their destination country for study abroad by Mazzarol, Choo and Nair (2001) indicate that recognition of the qualification in their home countries was a factor influencing study destination choice of 90% of Indian postgraduate students. The survey conducted in China by Mazzarol et al., (2001) revealed that recognition of qualification was a factor considered by 71% of respondents for choosing a place of study abroad.

This was supported by findings of a survey of international students who commenced study in 2000 (AEI, 2003b) and also confirmed by the findings of another study that investigated choice of Australia as a study destination country undertaken in March 2003 by IDP (2003e).

Standard of Course and Programmes

The results of a survey conducted by Rao (1976) showed that standard of course affect international students in choosing where they study overseas. The survey results of international students carried out by BIE (1989) show that a high standard of programmes was one of the reasons that international students make a decision to study in Australia. This was also confirmed by the findings of another study that investigated factors considered by international students (Industry Commission, 1991; Smart and Ang, 1995) and their parents (Smart and Ang, 1995).

Lawley's (1993) findings about factors influencing Hong Kong students in making a decision to study abroad show that one of the factors that influenced Hong Kong students in making a decision to study abroad was the standard of courses. This factor was also supported by the survey in three South Australian universities by Mullins, Quintrell and Hancock (1995) as one of the factors affecting international students when making a decision about study abroad. In addition, the research paper presented about destination choice by international students when making a decision for their studies abroad by Lawley and Blight (1997) revealed that the standard of courses is an important factor for Malaysian, Indian and Thai students.

According to findings of research reported by Eduworld (2001) that investigated choice factors and influences for studying overseas of Asian undergraduates revealed that standard and quality of education was one of the most important factors these students considered when choosing a place to study abroad. Further, this finding also showed that this is a reason why they finally selected their institutions for their study overseas Eduworld (2001). This was supported by findings of the survey conducted in China by

Mazzarol et al. (2001) and the research carried out in India with Indian students who did not choose Australia as their destination country for study abroad by Mazzarol, Choo and Nair (2001). Moreover, quality of courses was also one of the most important factors for international students who commenced study in 2000 when they made a decision for their study abroad (AEI, 2003b; IDP, 2003e). The survey results involved with students' perceptions of major English speaking study destinations in 2003 revealed that Australia performed very well on quality of education: 7.9 out of 10 on a scale where 1 was defined as being lower quality of education, 10 being higher quality of education (IDP, 2003f). This is equivalent to the U.S.A and it is one of the reasons why Australia is getting more popular as one of the leading English study destinations for international students when deciding to study abroad. However, it should be noted that findings on choice factors and influences on Asian undergraduates studying overseas revealed students from China, Hong Kong, Japan, Singapore and South Korea rated the standard of education in their home country above that in Australia (Eduworld, 2001). Further, in Thailand, the findings of strengths and weaknesses of HEIs showed that the standard of international programmes was one of the influential factors in attracting international students to study in Thailand (DEP, 2002b).

Wide Range of Courses and Programmes

The study regarding international students in Australia carried out by Rao (1976) found that one of the reasons students came to study in Australia was a wider choice in fields of study. This was supported by the project undertaken in Australia undertaken by the Bureau of Immigration, Multiculture and Population Research (Nesdale et al., 1995). Correspondingly, Mazzarol (1998) suggested that higher education institutions should have the ability to offer a broad range of programmes for international students. Joseph and Joseph (2000) found that a wide range of courses and programmes was one of the factors considered by Indonesian students in choosing to study at HEIs in New Zealand.

HEI Facilities for International Students

Joseph and Joseph (2000) found that HEI's facilities, for example a recreation centre and academic resources also affected Indonesian students' choice when selecting to study at HEIs in New Zealand. Furthermore, findings by the DEP (2002b) about strengths and weaknesses of HEIs in Thailand indicate that HEIs' facilities such as a recreation centre, effective administration processes, kind staff for international students, a support policy of system of exemption and a modern library were influential factors in attracting international students to study in Thailand (DEP, 2002b). Good facilities was also found as one of the important factors for international students when choosing HEIs in the destination country (AEI, 2003b).

Scholarships and Financial Aid for International Students

One of the reasons that international students came to study in Australia was "granted scholarships" (BIE, 1989). The survey carried out by Rao (1976) showed that scholarships whether from the home government, the Australian government or from HEIs, was one of the reasons that international students came to study in Australia. This finding was also confirmed by a survey with international students at Clarion University in Western Pennsylvania in spring 1989 by Stewart and Felicetti (1991). Scholarships and financial assistance were two of the factors considered by Taiwanese students and their parents in the choice of destination for study abroad (Smart and Ang, 1995). Smart and Ang (1995) also suggested that Australia's HEIs should consider providing scholarships and financial assistance because, although a scholarship is a cost to the HEI, it is a good investment in long-term recruitment. Recently, this factor seems less important for Asian students when choosing HEIs for their study overseas (Lawley and Blight, 1997; Eduworld, 2001). However, exploratory research carried out in Middle Eastern countries showed that Iranian students are very interested in scholarship opportunities offered by overseas institutions (Coleman, 2004).

Completion Time of Study

The survey done in Singapore by Smart and Ang (1992) revealed that the time taken to complete the programmes was one of the aspects that affect international students' decisions when choosing a country in which to study because it affected the total cost of study abroad. This was supported by Back, Davis and Olsen (1997) who found that the length of programmes could be one of the factors considered by international students because it affected the total cost. Nevertheless, it should be noted that this was another factor that has not been identified as factors influencing international students for study abroad since 2000 (Eduworld, 2001; IDP, 2003e).

Counselling Service

Smart and Ang (1995) recommended that institutions should emphasise the good quality of their welfare and all support services (counselling service) for international students. They suggested that welfare and support services for overseas students constitute one of the factors international students and their parents consider when making a decision about study abroad. Further, in more recent research involving a survey of international students who commenced study in 2000 it was found that r eputation for looking after international students was one of HEIs' services that students indicated to be an important factor when making a decision to choose an HEI (AEI, 2003b).

The survey of Asian students in the U.K, the U.S.A., Australia and Canada undertaken by Eduworld (2001) showed that generally, students in all study destinations were quite satisfied with their institutions. One-third of these students thought their expectations had been exceeded. However, students in Australia seemed slightly less inclined to be highly satisfied with their institutions (30%) compared to those in the U.K (37%) and those in the U.S.A. (37%).

Hence, from these studies it is clear that HEI characteristics constitute a group of factors affecting international students when making a decision to study abroad. Therefore,

HEIs in destination countries should consider these factors when offering an international higher education service to prospective students.

2.5.3 Country Characteristics

Country characteristics have been identified in the literature as a group of factors influencing international students in making a decision for the place of their study abroad. These country characteristics include cost of living, opportunity for part-time jobs, opportunity for migration, safety, racism, geographical proximity, cultural issues, political stability and other facilities of the destination country such as public transportation.

Cost of Living

Previous studies have identified "the cost of the study abroad" in the generic term of "total cost" as one of the factors influencing international students in making a decision to study abroad" (Goldring, 1984; BIE, 1989;Kim and Crowley, 1989; DEET, 1994; Back, Davis and Olsen, 1997; Smart and Ang, 1992, 1993; Lawley and Blight, 1997; AIEF, 1998; Eduworld, 2001; Mazzarol et al., 2001; Mazzarol, Choo and Nair, 2001; AEI and IDP, 2002; DEP, 2002b; AEI, 2003b; IDP, 2003e,f; Coleman, 2004). However, in this study the cost of living has been classified in the group "country characteristics". Thus, in this section the cost of living beyond the cost of study (fees) is discussed. The comparative study of the costs of higher education courses for international students in Australia, New Zealand, the United Kingdom, Canada and the United States of America undertaken by Back, Davis and Olsen (1997) showed that the cost of living was a factor that international students considered when making a choice for study in other countries. However, they stated that the cost of living would be compared together with the completion time of study and the cost of programmes when international students make a final decision (Back, Davis and Olsen, 1997).

Mazzarol, Choo and Nair (2001) conducted their survey with Indian students who chose to study in countries other than Australia. They found that a lower cost of living was one of the factors influencing study destination choice for postgraduate students (37% of respondents). Similarly, Mazzarol et al. (2001) from their survey of understanding how Chinese students select a country for study abroad found that a lower cost of living was one of the influential factors in the selection of a study destination for 49% of the respondents. In a more research study conducted by IDP (2003e) on factors influencing choice of Australia as a study destination revealed that affordable cost of living was still considered by international students as one of the most influencing factors for them in choosing the place for their study in Australia. Further, from research involving a survey of international students who commenced study in 2000 it was found that cost of course was an important factor for international students when making a decision to choose a place for their study abroad (AEI, 2003b). The results of the DEP (2002b) survey of HEIs in Thailand also show that living expenses in Thailand were cheaper per year when compared to other countries.

Opportunity for Part-time Job

In Australia it is understood that "Giving students the right to work while studying increases the attractiveness of Australian education" (Industry Commission, 1991, p.97). In Australia, international students may have a visa which permits them to work part-time for up to 20 hours a week during semester time (Industry Commission, 1991). This finding was also confirmed by research conducted by Kim and Crowley (1989) on a study of ELICOS students' perceptions of aspects of studying in Australia. Mazzarol, Choo and Nair (2001) carried out their survey with Indian students who did not choose Australia as a country for study abroad. Their findings showed that an opportunity for part time work was one of the factors influencing the study destination choice of postgraduate students from India (91% of respondents). In a more research study conducted by IDP (2003e) on factors influencing choice of Australia as a study destination fundings revealed that opportunity for part time job was a factor considered by international students in choosing the place for their study in Australia**.** This factor is

also very attractive for Middle Eastern students, particularly for Iranians and the non Gulf Arabs (Coleman, 2004). However, Eduworld (2001) found from their survey of Asian students of 2000 that the ease of obtaining work while studying was becoming one of the two least important factors affecting students' choice of destination.

Opportunity for Migration

The study done in Singapore by Smart and Ang (1992) showed that the possibility for family migration to a particular country may influence the choice of a study destination. In Australia, the project undertaken by the Bureau of Immigration, Multiculture and Population Research showed that 43% of international students planned to migrate to Australia after finishing their degree (Nesdale et al., 1995). Further, the results of the survey conducted by Lawly and Blight (1997) showed that opportunity for migration to a study destination country was one of the country characteristics for international students when making a decision to study. This was found in the research with international students who commenced study in Australia in 2000 as the second most important factor for international students to come to study in Australia (AEI, 2003b). Nevertheless, it should be noted that this factor was not identified by others as one of the important factors influencing international students for study overseas (Eduworld, 2001; IDP, 2003e). However, it is noted that the impact of migration policy in terms of skills for migration on the number of international students that changes of skill migration policy might effect international students' enrolments (Hawthorne, 2005). For example, Information Technology enrolments have declined from 3,759 in 2001 to 2,798 in 2004, largely as a result of changing migration opportunities (Birrell, 2005). Although there might be an impact from changes in the requirements for permanent resident visas overall growth in Australia's international students' enrolments still continues. However, the latest AEI's report shows continuing steady growth in Australia's international education market. There was a total of 344,815 enrolments by full time – full fee international students in Australia. This shows an increase of 7% from 2004 (AEI, 2006)

Safety

The report on the factors which affect the efficient export of an education service by the Industry Commission (1991) revealed that personal safety was one of the reasons for international students choosing to study in Australia. Safe country was found to be a factor considered by Singaporean students and their parents when making a decision to study overseas (Smart and Ang, 1992). Similarly, results of the survey carried out in Hong Kong by Lawley (1993) indicate that safety was one of the country characteristics considered by Hong Kong students for their choice of study abroad. This factor is also presented in Lawley and Blight's (1997) research paper in the model of destination choice by international students as one of the important factors affecting Indian, Malaysian and Thai students for their choice of study abroad. Their research paper also relayed the findings of a survey carried out in Indonesia and Taiwan in 1996 which revealed that safety was one of the important factors for Indonesian and Taiwanese students when making a decision about study overseas Lawley and Blight's (1997).

A safe place was also identified as a factor influencing Chinese students for a choice of study destination abroad (Mazzarol et al., 2001). This was found also to be true for Indian students (Mazzarol, Choo and Nair, 2001) and Middle Eastern students (Coleman, 2004). The results of a survey by IDP involving factors influencing choice of Australia as a study destination showed that safe environment was one of the most influencing factors considered by international students when choosing the country for their study (IDP, 2003e). The survey results involving students' perceptions of major English speaking study destination in 2003 revealed that Australia received the highest performance as a safe place for study overseas (8.1 out of 10) followed by New Zealand (7.9 out of 10) while the U.S.A received the lowest average ranking (5.7 of 10) among these destination countries (on a scale where 1 was defined as being lower safety, 10 being higher safety) (IDP, 2003f).

Racism

The study regarding international students in Australia carried out by Rao (1976) found that racism was a factor that concerned international students when deciding to come to

Australia. Racism was found by Smart and Ang (1992) to be a factor of concern for international students and their parents in choosing a country for study abroad. This finding was also supported by their research conducted in Hong Kong (Smart and Ang, 1993). The research paper presented by Lawley and Blight (1997) about destination choice by international students showed that racism was one of the most important factors for Malaysian and Thai students when selecting a place for their study in overseas countries. Findings of the study on understanding how Chinese students select a country for overseas study undertaken by Mazzarol et al. (2001), showed that "little racial discrimination" in a destination country was one of the factors influencing Chinese students in choosing a place for study abroad. Similarly, survey results in India (Mazzarol, Choo and Nair, 2001) showed that "little racial discrimination" in destination countries was one of the factors influencing study destination choice of postgraduate students from India.

Jolly (1997) stated that the policy of a certain Australian political right wing party increased the international students' anxiety in coming to Australia. However, Carr, McKay and Rugimbana (1999) claimed that discrimination was not a big problem for international students who came to study in Australia.

Geographical Proximity

Geographical proximity was found by Rao (1976) to be a factor of concern for international students and their parents in choosing a country for study abroad. Results of the survey with international students prepared for the Committee of Review Private Overseas Students Policy (Goldring, 1984) of international students in Australia showed that one of the main reasons for coming to study in Australia was because of Australia's closeness to international students' home countries. The project carried out by Industry Commission (1991) entitled "export of education service report no.12" showed that international students would choose a country near their home countries for their study overseas. This was also supported by the findings of a report by Nesdale et al. (1995) about international students and immigration, which indicated that "close to home

country" was one of the international students' reasons for choosing to study in Australian universities. Geographically close to international students' home countries was one of the factors influencing study destination by Indian and Chinese students when choosing a place for study abroad (Mazzarol, Choo and Nair, 2001; Mazzarol et al., 2001). This was also supported by the survey results of Asian students of 2000 in the U.K., the U.S.A, Australia and Canada undertaken by Eduworld (2001). These survey results showed ease of travelling was one of the important factors for those who finally chose to study in Australia although this factor appeared to be weakening, decreasing from 39% of respondents (international students) in 1997 to 24% of respondents (international students) in the survey of the Asian Student of 2000: Choice Factors and Influences of Asian Undergraduates studying overseas conducted in 2000 (Eduworld, 2001). Similarly, distance is an important factor for Middle Eastern students and Australia is perceived as a destination country which is far away from their home countries (Coleman, 2004).

Cultural Issues

Exposure to other cultures was one of the main reasons given by international students who made a decision to study in Australia (Goldring, 1984). Different cultures in other countries may influence international student in choosing a place for study abroad. In-depth interviews with four exchange students from Cornell University who had experiences of study abroad indicated that one reason influencing them go to study in other countries was the culture of those destinations (Emanoil, 1999). Intercultural exchange was indicated by international students' as an expectation in making a decision to study abroad in Australia (Hellsten, 2002). In addition, results of a survey of international students who commenced study in Australia in 2000 showed that one of the important factors for international students for deciding to study in Australia was "a multicultural society" (AEI, 2003b, p. 20).

Other Physical Characteristics of Destination Country

Other essential processes in destination countries including ease in obtaining student visas, the quick processing of overseas student visas (DEP, 2002b) and good infrastructure such as public transportation have been formed to be factors influencing international students in selecting a destination for study abroad (Industry Commission, 1991; DEP, 2002b) as well as good telecommunications (DEP, 2002b).

Country characteristics are factors influencing international students in choosing a place for their study abroad. Lewins (1990) noted that overseas students in the UK considered the standard of living in the host country, and found that the more likely they were to be satisfied with their standard of living, the more likely they were to succeed in their study. Similarly, Humfrey (1999) found that international students, who are happy while studying abroad, are more likely to be successful in completing their programmes.

Findings of the survey undertaken by Eduworld (2001) showed that overall students were quite satisfied with their lives in their study destinations in Australia, the U.K and the U.S.A and there was only a small proportion (10%) who thought that their lives in their destination country did not meet their expectations. From these findings it can be inferred that, in order to increase international students' confidence in making a decision to study abroad, Australia's and Thailand's HEIs should consider these aforementioned factors, and learn more about international students' expectations for their study abroad and what their perceptions are during their studies (Eduworld, 2001).

2.5.4 Benefits of Study Abroad to International Students

"Benefits are desirable consequences consumers seek when buying and using products and brands" (Peter and Olson and Oslan 1996, p.69). When consumers make a decision to purchase a product/service, they normally assess what benefits they will gain after purchase (Mazumdar, 1993). Mazumdar (1993) claimed that consumers trade off benefits against the price they pay for a product/service and then compare results in

perception of value. Mazumdar (1993) also stated that the higher the perceived value, the greater consumers' willingness to adopt a new product/service. Experimental results on consumers' beliefs about product benefits indicated that consumers look for information that suggests a product/service will deliver desired benefits to them and classify other irrelevant information as disconfirming a product/service (Meyvis, 2002). These experimental results also showed that irrelevant information weakens consumer beliefs about the ability of a product/service to deliver benefits to them (Meyvis, 2002).

Despite the fact that most authors have not used the term benefits in their research on international students' choice of destination countries for studying abroad nevertheless, much research has been undertaken and expectations and advantages of studying abroad have been identified. Many of these expectations and advantages may be interpreted as benefits. Therefore, despite the perceived risks, international students do realise the benefits of studying abroad. In this study it was, therefore, intended to test perceptions in benefits of study abroad by international students at different stages in the proposed model of "the International Students' Innovation Decision Process".

International students from the Middle-East, Southeast Asian countries, and Pacific Islands expect that studying in Australia may enhance their opportunities to have good careers in their home countries, and also to increase the chance of broadening their experience (Rao, 1976; Emanoil, 1999, Eduworld, 2001). An opportunity to study English with native speakers, might be considered by international students when deciding to study abroad (Rao, 1976). Having better career opportunities was a benefit that international students expected to gain after finishing their degrees overseas (Hellsten, 2002). This was also supported by the survey of international students who commenced their studies in Australia in 2000 (AEI, 2003b). Other aspects, such as intercultural exchange and language improvement were also found from the results of in-depth interviews with small sample of international students conducted in Australia as an expectation of their study abroad (Hellsten, 2002).

2.5.5 Risks of Study Abroad to International Students

The notion of perceived risk was first introduced by Bauer in 1960, and was interpreted by Ostlund in 1974 (Holak and Lehman, 1990). “Perceived risk is defined as the uncertainty that consumers face when they cannot foresee the consequence of their purchase decisions” (Schiffman and Kanuk, 1997, p.183). Risk taking theory indicates that consumers decide to purchase a new product/service under some uncertainty (Sheth and Venkatesan, 1968). Clift (1997) stated that the mount of perceived risk relates to the consumers’ level of uncertainty about the value and the purchase amount.

A study by Sheth and Venkatesan (1968) investigated the risk reduction process in repetitive consumer behavior and found that the risk seems to increase at the beginning but then reduces over time. Taylor (1974) claimed that when an innovative product/service is first introduced it might create customer anxiety about making decisions. Their concern involves two features of risk: uncertainty about the outcome and uncertainty about the consequences of the outcome and the level of perceived risk may also affect their decision. Consumers’ risk perceptions can happen both in purchasing products and services. The research results of Mitchell and Greatorex (1993) also indicated that purchasing services is riskier than purchasing products.

According to Taylor (1974), companies have to find out how to reduce prospective customers’ anxiety. Risks reduction can be managed in two ways, it can be reduced by gathering and controlling information relating to doubtful outcomes (Bettman, 1973; Taylor, 1974) and concern about uncertain consequences can be decreased by reduction in customers’ choices (Taylor, 1974).

Roselius (1971) suggested that a company might first indicate the level of risk perceived by consumers and develop a risk reliever programme that is appropriate for consumers, for example a product/service guarantee. A study conducted in behavioral changes in the trial of new products indicated that consumer’s risk perception could be reduced by

purchasing a product in a small quantity and having information about a product (Shoemaker and Shoaf, 1975).

Mitchell (1992) claimed that perceived risk affects consumers when making a decision to purchase a product/service. It is a challenge for product/service providers to use this knowledge in order to gain a competitive advantage for their business (Mitchell, 1992). In addition, consumer risk perception analysis is also useful for product/service providers in making a decision about marketing resources management, brand image development, targeting, positioning, segmentation and new product development (Mitchell, 1998).

To date, as far as the author is aware, there has been no research reported which has investigated international students' perception of risk relating to choices of destination countries for studying abroad. However, there has been research undertaken that has identified the factors and problems which have been of concern to international students when making a decision to study in other countries. Culture shock was one of the problems identified that international students faced when they were studying abroad (Goldring, 1984; Burke, 1986; Lewins, 1990; De Fazio, 1999; Hellsten, 2001). Homesickness and English communication problems have all been reported as concerns of students when they are studying in other countries (Burke, 1986; Kim and Crowley, 1989; Lewins, 1990; De Fazio, 1999). Financial difficulties was another of the problems identified by international students who were studying abroad (Kim and Crowley, 1989; Burke, 1986; Lewins, 1990).

Racial discrimination was identified as a country characteristic which international students have constant concerns about, even after making the decision to study abroad (Goldring, 1984; Smart and Ang, 1992, 1993; Jolly,1997). Nevertheless, it has not been shown to be a big problem in Australia (Carr, McKay and Rugimbana, 1999).

These problems might be identified as risks which international students take, not only before making the decision to study abroad but also while they are studying in a

destination country. In this study, the survey was conducted with international students who had already made a decision to enrol at HEIs in Thailand/Australia. Thus, international students' risk perceptions were examined at the different stages of the proposed model of "the International Students' Innovation Decision Process".

Five main groups of factors: HEI characteristics, country characteristics, sources of information, benefits and perceived risks of study abroad can be identified as the basis of perception of international students who intend to study abroad. HEIs, both in Australia and Thailand, should be concerned about these factors because they affect the international students' decision in choosing places for their study and their intention to complete their study. This is more crucial for HEIs in Thailand as they are at the first stage of offering international programmes to international students. Therefore, it is necessary to consider the factors which affect international students in developed countries, for example Australia, then apply them in a model to test with international students in Thailand.

2.6 International Higher Education Service: An Innovation for International Students

Smart and Ang (1995) stated that going to study abroad is often the first time that students leave home, thus international higher education service in this study is defined as a "new" service (an innovation) for international students, who made a decision to enrol at HEIs in other countries. Therefore, in this study, international higher education service is defined as a new service (an innovation) for international students, who made a decision to enrol at HEIs outside their home countries.

The word "innovation" is more complicated to define (Jefferson, 1973). However it may be identified as something that does not happen naturally but needs to be controlled by people (Jefferson, 1973). An innovation is identified as "any idea, practice, or material artifact perceived to be new by the relevant unit of adoption" (Zaltman, Duncan and

Holbek, 1973, p.10). It can be “any ideas, practices or objects which people see as new and different” (Zaltman and Wallendorf, 1979 p. 449) or “an idea, practice, or object that is perceived as new by an individual or other unit of adoption” (Rogers, 1983 p.11). According to Engel, Blackwell and Miniard (1986, p.530) the most commonly accepted definition is that an innovation is “any idea or product perceived by the potential adopter to be new”. More recently Nohria and Gulati (1996, p.1248) have added “any policy, structure, method, process, product or market opportunity, which the innovating unit perceived to be new” (Nohria and Gulati, 1996, p.1248).

Slappendel (1996) defined “innovation” as the process through which new ideas, objects and practices are created, developed or reinvented. Another definition of innovation is provided by Johannessen, Oslen and Lumpkin (2001) that emphasises novelty and newness. Their study also suggests that three basic questions about the nature of newness should be asked: what is new, how new, and new to whom?” to determine what innovation is. Moreover, an innovation may also be an offering that is perceived as new by consumers within a market segment and that has an effect on existing consumption pattern (Hoyer and MacInnis, 2001). Further, five innovation characteristics that likely influence consumer acceptance of a new product/service have been identified (Rogers, 1995). These are relative advantage, compatibility, complexity, trialability and observability. In addition, perceived risk has been referred to as one of the innovation characteristics that should be considered (Holak and Lehman, 1990).

2.6.1 Types of Innovation

A new product or a new service as an innovation can increase an opportunity to satisfy personal, social and environmental needs of consumers. A new product or a new service can be defined and classified under a firm-, product-, market- or consumer-oriented definition of innovation. (Shiffman and Kanuk, 1997).

- **Firm-Oriented Definition:** defines the newness of a product from the company’s perspective when a company produces or markets it. However, this

definition does not consider whether or not a product/service is new to competitors or consumers.

- **Product-Oriented Definition:** defines the newness by focusing on the feature of the product/service itself and how these features can affect consumer usage behaviour. Product innovation can be classified into three categories; a continuous innovation, a dynamically continuous innovation or a discontinuous innovation (Engel, Blackwell and Miniard, 1995; Shiffman and Kanuk, 1997). A continuous innovation involves product/service modification rather than a totally new product/service. A dynamically continuous innovation relates to the formation of either a new product/service or a modification of an existing one but does not change customer purchasing behavior and the product/service used.

- **Market-Oriented Definition:** approach to define newness in terms of how much consumers know about a new product/service. It is a subjective definition because a product/service is considered to be new if it has been on the market for a short period of time or if it has been purchased by a small percentage within a potential market.

- **Consumer-Oriented definition:** in this definition, the newness of a product/service is based on the consumer's perception of that product rather than product features or real market situations.

The international higher education service for this study is defined under the consumer-oriented definition because it is perceived to be a "new" service for consumers (international students) when they started seeking out information for their study abroad in Thailand or Australia.

2.6.2 The Innovation Decision Process

Consumer acceptance of a new product/service is described by the research area known as the diffusion of innovation. It is a challenge for a company to understand the motives of consumers when they first purchase a new product/service because this leads to the success or failure of the introduction of a new product/service for a company (Shiffman and Kanuk, 1997). If a company does not understand consumers and fails in providing information to convince them, consumers seem less interested in an innovation (Zaltman and Wallendorf, 1979). Similarly, Johne (1999) stated that, in order to achieve competitive success in introducing a new product/service, a company must understand the customers' needs.

The diffusion model has supported understanding about the consumption of a new product (Rogers, 1976). Rogers (1983) defined diffusion as a process which consists of four main elements: "an innovation", which "communicates" through certain channels "over time" among "members of a social system". Rogers (1983) also stated that time is crucial to diffusion in the innovation-decision process, innovativeness and an innovation's rate of adoption. The Innovation Decision Process was first proposed by Rogers in 1962 and subsequently modified in 1983 and 1995 (Rogers, 1995). Rogers proposed an innovation framework whereby the innovation uses communication channels to diffuse itself through a social system over a period of time. He also proposed that, for the consumer, the process starts with knowledge of the innovation and then passes through a persuasion stage to form an attitude toward an innovation before a decision is made to purchase. This is followed by an implementation stage and finally confirmation of the decision stage. Each stage of the innovation decision process is discussed in the following section:

- **Knowledge Stage:** happens when a decision maker is exposed to the innovation of a product/service and obtains some awareness from sources of information how it performs.

- **Persuasion Stage:** happens when a decision maker sets a favorable or unfavorable attitude towards the innovation. This involves an attitude formation of consumers toward an innovation.
- **Decision Stage:** happens when a decision maker undertakes activities which lead to a selection of adoption or rejection of the innovation.
- **Implementation Stage:** happens when a decision maker accepts an innovation for use. The implementation stage may continue over a period of time depending on the type of innovation. Whenever an innovation finally loses its identity as a new product/service, this point is actually identified as the end of the implementation stage.
- **Confirmation Stage:** happens when a decision maker confirms the decision to adopt the innovation after an innovation-decision had been made. After an adopter makes a decision to reject or to adopt an innovation, the confirmation will be made over a period of time. At this stage, dissonance may happen towards an innovation. However, an adopter tries to avoid the dissonance by selecting information which they expect to confirm their original decision.
  (Rogers, 1995)

Vrechopoulos, Siomkos and Doukidis (2001) noted that, when an innovation is launched in the market, consumers learn about it, make a decision to buy, and implement it, then decide whether to confirm or disconfirm it. Confirmation may be defined as the stage where a product/service has been accepted by consumers and the extreme success of an innovative product/service depends on the extent to which it is accepted by customers (Holak and Lehman, 1990).

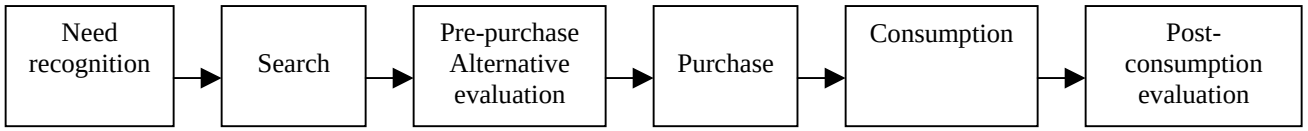
Moreau, Lehman and Markman (2001) stated that although the innovation diffusion models are well known for predicting consumer adoption patterns of a new product/service, however there has been little research that has investigated how individual consumers learn about and develop preferences for a new product/service.

2.7 The Conceptual Model of "the International Students' Innovation Decision Process"

There are many models of the consumer decision process which have been developed by many academics (Peter and Olson, 2005). For example, Moven and Minor (1998) claimed that the consumer decision process consists of a series of five stages; problem recognition, search, alternative evaluation, choice and postaquisition evaluation. Hoyer and MacInnis (2000) developed a consumer decision process in four generalised stages: problem recognition, information search, decision making and post purchase evaluation.

However, a well known model of the consumer decision making process was developed by Engel, Kolat and Blackwell in 1973 called "EKB" model, then was revised by Engel, Blackwell and Miniard (1986) called "EBM" model. The "EBM" model shows how different variables relate to each other in the behavioral processes and also explores problem solving in the decision process (Engel, Blackwell and Miniard, 1986). The consumer decision process proposed by Engel, Blackwell and Miniard (1995) is shown in Figure 2.1.

Figure 2.1 A Flowchart of the Engel, Blackwell and Miniard (EBM) Consumer Decision Process



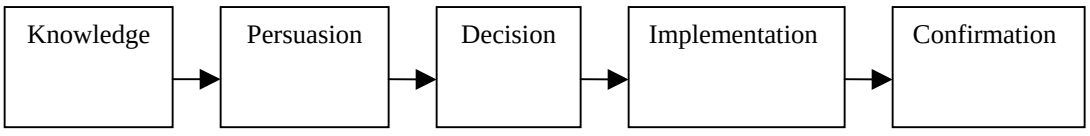
Source: Engel, J.F, Blackwell, R.D and Miniard, P.W. 1995, p.134

An existing model of how international students choose the destination for their study abroad was developed by Lawley (1993) based on the consumer decision making process of Engel, Blackwell and Miniard (1986). Lawley' s model focuses on the factors influencing Hong Kong students in the selection of a place for their study abroad and this model was developed with different approaches to explore international students'

intentions and their choice for study in English speaking destination countries (Lawley and Blight, 1997). Another existing model of the influence of family, peers and education agents (as personal sources of information) on Thai students' choice of international education was developed by Pimpa (2001) which was also based on the generic model of the consumer decision process. Nevertheless, marketing of education programmes involves the selling of an expensive product (in terms of both time and money) (Nicholls et al., 1995) thus, in order to allow for risks and uncertainty, it is necessary to extend the decision process (Murray, 1991).

This study is an attempt to investigate how international students learn about the international higher education service as a "new" service which involves some risks for them. As a new service, consumers are expected to adopt or reject, and it is a difficult task for marketers to know how to stimulate the consumers' buying process (Engel, Blackwell and Miniard 1995). Therefore a unique decision making process was proposed for use in this study. This study focuses on innovation (international higher education service) from the international students' (consumers) perspective, hence an innovation in the "consumer-oriented definition" of an innovation applies to this study. International students who seek out information for study abroad, have not usually had experiences with HEIs and the countries that they will choose for their study overseas. Therefore, the international higher education service of HEIs in Thailand/Australia is a "new" service when international students make a decision to enrol at HEIs in these two countries. Thus, the innovation decision process is an appropriate process for proposing a model of "the International Students' Innovation Decision Process". A flowchart of the innovation decision process is shown in Figure 2.2.

Figure 2.2 A Flowchart of Innovation Decision Process



Source: Adapted from Roger, E. M. 1995, p.163

Factors affecting the international students' decision process for choice of their study abroad were drawn from a wide range of previous studies. However, this study of "the International Students' Innovation Decision Process" focuses on different dimensions from previous studies. Therefore, only five main groups of factors: HEI characteristics, country characteristics, sources of information, benefits and perceived risks of study abroad from the literature were incorporated into the proposed model of "the International Students' Innovation Decision Process" and tested against international students in Thailand and Australia.

2.8 A Proposed Model of "the International Students' Innovation Decision Process"

A model of "the International Students' Innovation Decision Process" was developed by adapting the theory of "an innovation" and a model of "the innovation decision process" (Rogers, 1995). This was then tested with international students who chose HEIs in Thailand and in Australia for their study abroad. For the international students in this process, the decision to study abroad is new for them. Factors affecting international students when making a decision to study and factors affecting their intention to complete the programmes were incorporated into the model. In this section, each stage of the model will be discussed in detail.

2.9 Stages in the Proposed Model of "the International Students' Innovation Decision Process"

A model of "the International Students' Innovation Decision Process" in the selection and confirmation of international students for the higher education service in Thailand and in Australia was based upon Rogers' model (1995) and the factors influencing international students in making a decision to study abroad were identified from a wide range of previous studies. Five stages were proposed for the model of "the International Students' Innovation Decision Process" used by the international students in Australia and Thailand:

- Knowledge stage;
- Persuasion stage;
- Decision stage;
- Implementation stage; and
- Confirmation/Disconfirmation stage

In the following sections the five stages and the factors involved in each stage of the model for "the International Students' Innovation Decision Process in Thailand and in Australia" are discussed.

2.9.1 Knowledge stage

In this stage, sources of information provide international students with knowledge about the higher education institutions and country characteristics including benefits and risks of studying abroad. This information creates awareness and knowledge for international students. The factors involved and the international students' actions are assembled from previous studies (see section 2.5.1-2.5.5, pp.38-61) and an exploratory experience survey related to international higher education service. The experience survey for this study was only conducted in Thailand due to the lack of previous research and sufficient secondary data in this area. Interviews for the experience survey were conducted in January 2001 with two persons, who had been involved with international students/international higher education service (see chapter 3, section 3.4.1.2, pp.95-97). One of these interviewees was Director of International School of a private university in Bangkok, another one was Director of International Affairs of a state university in Bangkok.

2.9.1.1 Sources of Information: Assessment at the Knowledge Stage

Sources of information have been recognised as essential factors in the facilitation of international students' knowledge for assessing and then choosing an institution and the

country for their study. These have been identified by several previous studies on the international higher education service that were discussed in section 2.5.1. These sources of information were adapted and incorporated in the model of "the International Students' Innovation Decision Process" for international students in Australia and Thailand as shown in Table 2.1.

Table 2.1 Sources of Information Affecting International Students at the Knowledge Stage

<table>
<tr><th colspan="2">Source of Information Used by International Students in Australia and in Thailand</th><th>International Students' Action</th></tr>
<tr><td colspan="2">• Independent agents
• Direct promotion by Australia's HEIs
• Newspapers or magazines
• Internet
• Parents
• Relatives
• Friends
• Employer or organization who sponsors my study*
• Education trade exhibition or fairs</td><td rowspan="3">International students obtain information about study abroad from a wide range of these sources of information</td></tr>
<tr><td colspan="2">Sources of Information Used by International Students in a Particular Country</td></tr>
<tr><td>a1) In Australia
- Australian Education Centres (AECs)
- IDP Education Australia (IDP)</td><td>a2) In Thailand
- Thai Embassy</td></tr>
</table>

Sources: Most variables gathered from previous studies (see section 2.5.1, pp.38-43) except *"Employer or organization who sponsors my study" collected from experience survey (part of exploratory research) in Thailand (see chapter 3, section 3.4.1.2, pp.95-97).

Note: a1) Sources of information used in Australia

a2) Sources of information used in Thailand

Sources of information used by international students are similar in both countries except two sources (AECs and IDP) that are not applicable in Thailand and one source (Thai embassy) that is not applicable in Australia. According to previous studies, these sources have become major factors for consideration by international students. The international students choose from the different sources and collect all the relevant information they believe they need in order to make a decision about study abroad. The information they wish to know about includes HEI characteristics, destination country characteristics as well as benefits and risks of studying abroad.

2.9.1.2 HEI Characteristics: Assessment at the Knowledge Stage

HEI characteristics have been identified as factors affecting international students when making a decision about HEIs and the country for their study. These factors have been identified by previous studies as HEI characteristics influencing international students in making a decision for study abroad (see section 2.5.2, pp.44-51). These HEI characteristics were adapted to build the model of "the International Students' Innovation Decision Process" for international students in Thailand and in Australia. The HEI characteristics were incorporated in the model of "the International Students' Innovation Decision Process" for international students in Thailand and in Australia as shown in Table 2.2.

Table 2.2 HEI Characteristics Affecting International Students at the Knowledge Stage

HEIs Characteristics affecting International Students in Australia and in Thailand (at the knowledge stage)	International Students' Action
• Reasonable cost of study • Good reputation • System of exemptions • Standard of courses • Recognition of qualification • Wide range of courses and programs • Completion time of study • Excellent facilities for international students • Modern and sufficient library resources • Effective international department • Friendly staff • Counseling service available to support international students • Scholarships for international students • Financial aid for international students	International students receive information about HEI characteristics from a wide range of sources of information

Sources: HEI characteristics gathered from previous studies (see section 2.5.2, pp.44-51)

In this study, international students receive information of HEI characteristics in the destination country where they wish to study from a wide range of sources and keep it as the knowledge in the knowledge stage. HEI characteristics used to test with international students were the same in both countries.

2.9.1.3 Country Characteristics: Assessment at the Knowledge Stage

Country characteristics constitute a group of factors influencing international students in choosing a place for study abroad. These have been identified by previous studies involving country characteristics that international students considered when making a decision for their study abroad (see section 2.5.3, pp.52-58). These country characteristics were adapted and included in the model of "the International Students' Innovation Process" for international students in Thailand and in Australia as shown in Table 2.3.

Table 2.3 Country Characteristics Affecting International Students at the Knowledge Stage

<table>
<tr><th colspan="2">Country Characteristics affecting International Students in Australia and in Thailand (at the knowledge stage)</th><th>International Students' Action</th></tr>
<tr><td colspan="2">• Safe city
• Reasonable cost of living
• Opportunity for part time job
• Easy to apply for student visas
• Good public transportation service
• Opportunity for migration
• Near home country
• No racial discrimination
• Political stability*</td><td rowspan="3">International students receive information about country characteristics from a wide range of sources of information.</td></tr>
<tr><th colspan="2">Country Characteristics affecting International Students in a Particular Country (at the knowledge stage)</th></tr>
<tr><td>a1) In Australia
- Diversity of culture</td><td>a2) In Thailand
- Interesting and unique culture</td></tr>
</table>

Sources: Most country characteristics gathered from previous studies, these include "diversity of culture" as well as "interesting and unique culture" (see section 2.5.3, pp.52-58) except * "political stability" collected from experience survey (part of exploratory research) in Thailand (see chapter 3, section 3.4.1.2, pp.95-97)

Note: a1) Country characteristics affecting international students in Australia (at the knowledge stage)
a2) Country characteristics affecting international students in Thailand (at the knowledge stage)

Country characteristics affecting international students are similar in both countries except one characteristic (diversity of culture) that is not applicable in Thailand, and one

characteristic (interesting and unique culture) that is not applicable in Australia. International students receive information about the country characteristics from a wide range of sources and keep it as knowledge in the knowledge stage.

2.9.1.4 Benefits of Studying Abroad: Assessment at the Knowledge Stage

The benefits for international students of studying abroad constitute a group of factors, which are considered by international students because they may increase their opportunities to have good careers in their home country, and also to enhance the chance of broadening their experiences (Rao, 1976; Emanoil, 1999). An opportunity to study English with native speakers might be considered by international students when making a decision to study abroad (Rao, 1976). These benefits of studying abroad for international students were assembled from previous studies based on Australia's experiences to build up the model of "the International Students' Innovation Decision Process" for international students in Thailand and in Australia. However, Thailand does not use English as a native language therefore, the benefit of "learn English with native speaker" was irrelevant and removed from the list of benefits for international students wishing to study in Thailand.

The benefits of studying abroad were incorporated in the model of "the International Students' Innovation Process" for international students in Australia and Thailand as shown in Table 2.4.

Table 2.4 Benefits of Studying Abroad Considered by International Students at the Knowledge Stage

Benefits considered by International Students in Australia and in Thailand (at the knowledge stage)	International Students' Action
• Broaden experiences • Increase international understanding***** • Get a better job after finishing the degree • Earn more money in home country after finishing the degree*****	International students receive information about the benefits of studying abroad from a wide range of sources of information.
Benefits considered by International Students in a Particular Country (at the knowledge stage)	
a) In Australia - Learn English with native speakers	

Sources: Benefits of study abroad gathered from previous studies (see section 2.5.4, pp.58-59) except "increase international understanding" and "earn more money in home country after finishing the degree" collected from experience survey (part of exploratory research) in Thailand (see chapter 3, section 3.4.1.2, pp.95-97).

Note: a) Benefits considered by international students in a particular country (at the knowledge stage)

Benefits of study abroad used to examine with international students are similar in both countries except one benefit (learn English with native speakers) that is not applicable in Thailand.

The benefits of studying abroad have been considered by international students before making a decision. They receive information about these benefits from selected sources of information and keep the information in the knowledge stage.

2.9.1.5 Risks of Studying Abroad: Assessment at the Knowledge Stage

The level of risk may affect customers' decision making when a new product/service is introduced (Taylor, 1974). Different culture, homesickness, money difficulties and English communication problems have all been reported as concerns of students when they are studying abroad (Lewins, 1990). These problems might be identified as risks, which international students are willing to take, not only considered when making a

decision to study abroad but also while they are studying abroad. Racial discrimination was identified as one of the problems about which international students are constantly concerned, although they had already made the decision to study abroad (Jolly, 1997).

The risks of studying abroad for international students are incorporated in the model of "the International Students' Innovation Decision Process" for international students in Australia and Thailand, and were gathered from previous studies (see section 2.5.5, pp.59-61) based on Australia's experiences. The risks of studying abroad were included in the model of "the International Students' Innovation Process" for international students in Australia and Thailand as shown in Table 2.5.

Table 2.5 Risks of Studying Abroad Considered by International Students at the Knowledge Stage

Risks considered by International Students in Australia and in Thailand (at the knowledge stage)	**International Students' Action**
• Expense increase while studying • Home sick • Culture Shock • English language problem • Discrimination from local people	International students receive information about the risks of studying abroad from a wide range of sources of information.
Risks considered by International Students in a Particular Country (at the knowledge stage)	
a) In Thailand Communication problem with local people*	

Sources: Risks of study abroad gathered from previous studies (see section 2.5.5, pp.59-61) except * "communication problem with local people" collected from experience survey (part of exploratory research) in Thailand (see chapter 3, section 3.4.1.2, pp.95-97).

Note: a) Risks considered by international students in a particular country (at the knowledge stage)

The risks of study abroad used to examine with international students are the same in both countries. However, there is one more risk, communication problems with local people, that was added to the model for testing only in Thailand because Thai people use Thai as their native language and some of them cannot communicate in English.

The risks of studying abroad have been considered by international students when making a decision. They receive information about these risks from selected sources of information and keep the information in the knowledge stage.

International students receive information about higher education characteristics, country characteristics, benefits and risks from different sources as the knowledge about studying abroad at the knowledge stage in "the International Students' Innovation Decision Process". The knowledge they have will lead them to the persuasion stage of the model.

2.9.2 Persuasion Stage

At the persuasion stage in "the International Students' Innovation Decision Process", international students gather information from a wide range of sources of information. The importance of information sources is assessed by international students and their expectations of HEI and country characteristics are formed. In addition, benefits and risks of study abroad are also evaluated and traded off in this stage.

Sources of information, HEI and country characteristics, benefits and risks of studying abroad are assessed at the persuasion stage in the model of "the International Students' Innovation Process" as shown in Table 2.6

Table 2.6 Factors Affecting International Students at the Persuasion Stage

Group of Factors involved with International Students in Australia and Thailand	International Students' Action
• Sources of information • Higher education characteristics • Country characteristics • Benefits of studying abroad • Risks of studying abroad	-International students assess the importance of sources of information. -International students form the expectation about HEI and country characteristics. -Benefits and risks are assessed at this stage.

Sources: All variables gathered from previous studies (see section 2.5.1-2.5.5, pp.38-61) and experience survey (part of exploratory research) in Thailand (see chapter 3, section 3.4.1.2, pp.95-97)

At the persuasion stage, the important sources of information, the expectations about HEI and country characteristics, benefits and risks of study abroad are assessed. After the assessment, the international students' decision for the destination of their study abroad will be made at the decision stage.

2.9.3 Decision Stage

After international students have assessed the importance of sources of information, form their expectations about HEI and country characteristics and trade off benefits and risks of studying abroad they will make a decision to enrol (adopt) or reject the international higher education service offered by HEIs in Thailand/Australia.

In this study, international students who had already enrolled (adopted) in courses offered by the international higher education services of HEIs in Thailand and in Australia were targeted as respondents. This means that these international students were supported by activities, which led them to make a decision to come to study in Thailand/Australia. This shows that important sources of information, positive perception (*high expectations*) about HEI and country characteristics, high benefits and perceived risks of study abroad, influenced them to make a decision to enrol at a HEI in Thailand/ Australia.

International students' decisions for their study abroad in Thailand/Australia are made at the decision stage in the model of "the International Students' Innovation Process" as shown in Table 2.7.

Table 2.7 Factors Affecting International Students at the Decision Stage

Group of Factors involved with International Students in Australia and Thailand	International Students' Action
• Sources of information • HEI characteristics • Country characteristics • Benefits of studying abroad • Risks of studying abroad	- After international students assess the importance of sources of information, the most important sources of information will influence them in making a decision to enrol at HEIs in Thailand/Australia. - After international students form their expectations about HEI and country characteristics, positive perceptions of these characteristics will influence them in making a decision to enrol at an HEI in Thailand/Australia. - After benefits and risks are assessed, high benefits and low perceived risks of study abroad will influence them in making a decision to enrol at an HEI in Thailand/Australia.

Sources: All variable gathered from previous studies (see section 2.5.1-2.5.5,pp.38-61) and experience survey (part of exploratory research) in Thailand (see chapter 3, section 3.4.1.2, pp.95-97)

At the decision stage, important sources of information, positive perceptions about HEI and characteristics and benefits of study abroad will influence international students in making a decision to enrol at HEIs in Thailand/Australia.

2.9.4 Implementation Stage

At this stage, international students have already enrolled and have started studying at their selected HEI in Thailand/Australia. The HEI and country are then re-evaluated and benefits and risks are also re-assessed. Their experiences at the implementation stage will lead them to the final stage of "the International students' Innovation Decision Process" in order to "confirm" (intend to complete their study) or "disconfirm" (do not intend to complete their study) the international higher education service offered by HEIs in Thailand/Australia. The factors and international students' actions involved are shown in Table 2.8.

Table 2.8 Factors Affecting International Students at the Implementation Stage

Group of Factors Affecting with International students in Australia and Thailand	International Students' Action
• HEI characteristics • Country characteristics • Benefits of studying abroad • Risks of studying abroad	• Benefits and risks of studying abroad are re-assessed whilst studying. • HEI and country characteristics are assessed during their studies.

Sources: All variable gathered from previous studies (see section 2.5.1-.2.5.5, pp.38-61) and experience survey (part of exploratory research) in Thailand (see chapter 3, section 3.4.1.2, pp.95-97)

While international students are studying at their selected institution in Thailand/ Australia, they will re-assess HEI and country characteristics. Benefits and risks of studying abroad are also re-evaluated. The results of their assessment will lead them to the confirmation stage in the model of "the International Students' Innovation Decision Process".

2.9.5 Confirmation/Disconfirmation Stage

At the confirmation stage of the "the International Students' Innovation Decision Process", international students will either confirm or disconfirm their decision to continue their enrolment in the destination country by complete or discontinue their study. International students' actions at the confirmation stage are shown in Table 2.9.

Table 2.9 Factors Affecting International Students at the Confirmation/ Disconfirmation Stage

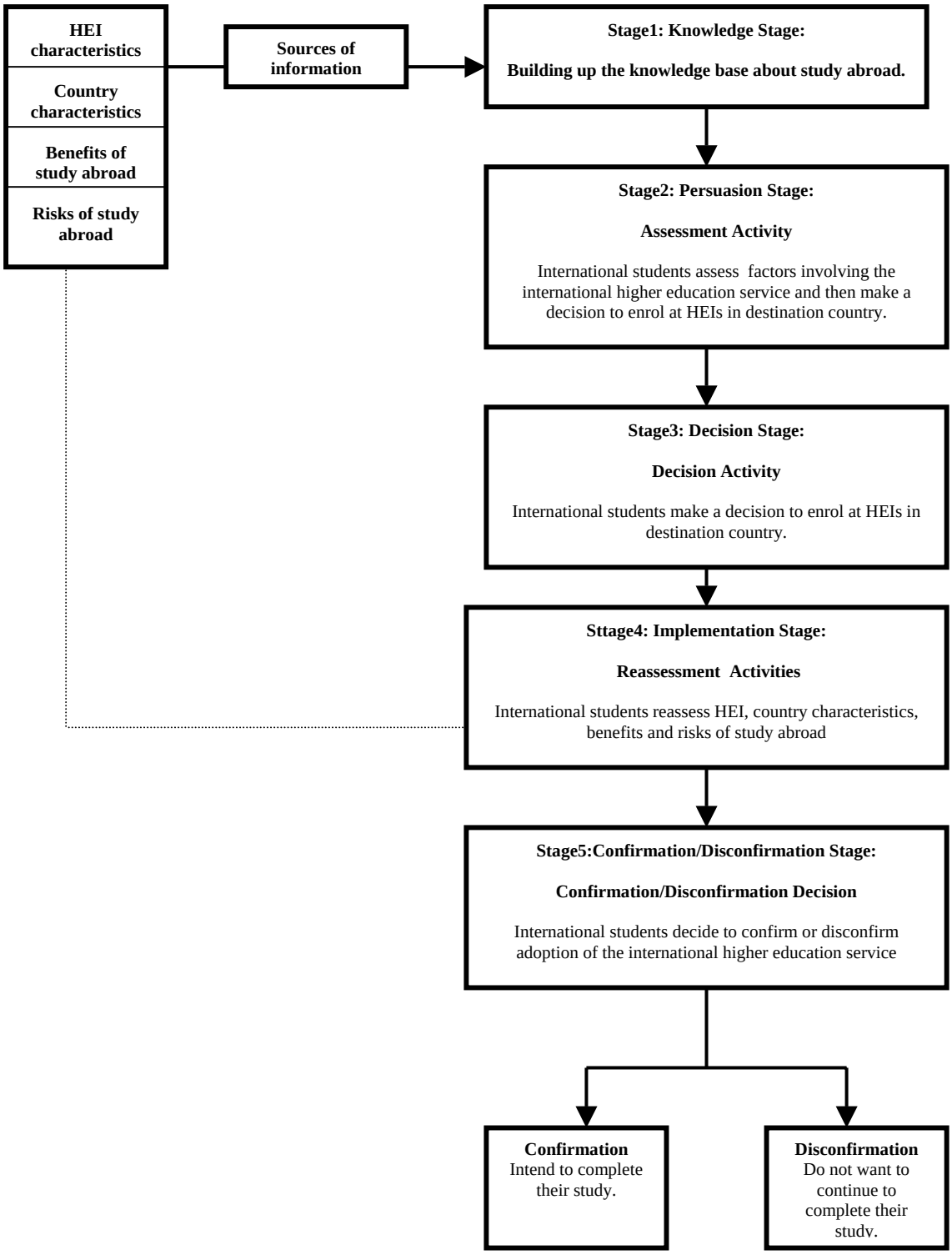
Group of Factors involved at the confirmation/disconfirmation stage	International Students' Action
• HEI characteristics • Country characteristics • Benefits of studying abroad • Risks of studying abroad	**Confirmation** • International students decide to complete their studies **Disconfirmation** • International students decide to discontinue their studies

Sources: All variables gathered from previous studies (see section 2.5.1-2.5.5, p.38-61) and experience survey part of exploratory research) in Thailand (see chapter 3, section 3.4.1.2, pp.95-97).

The confirmation/disconfirmation stage is the final stage of the “the International Students’ Innovation Decision Process”.

Five groups of factors; sources of information, HEIs characteristics, country characteristics, benefits and risks of study abroad are included in the model of “the International Students’ Innovation Decision Process”. These factors will be used to test each stage of the model of “the International Students’ Innovation Decision Process” based upon hypotheses that were developed from “the innovation decision process” (Rogers 1995). A flowchart of the proposed model of “the International Students’ Innovation Decision Process” is provided in the following section.

Figure 2. 10 A Flowchart of the Proposed Model of "the International Students' Innovation Decision Process"



* In this study, international students had already made a decision to enrol (adopt) the international higher education service at HEIs in Thailand/Australia.

2.10 Hypotheses of the study

The hypotheses for this study were developed in order to test the proposed model of "the International Student' Innovation Decision Process". However, to date, as far as the author is aware, none previous researches has been carried out to investigate the factors affecting international students by adapting the innovation decision process for testing with international students. Therefore, ten hypotheses related the theoretical framework and research questions were developed for this study. These ten hypotheses were developed as follows:

Hypothesis 1 *The more important the source of information, the greater the influence it has on international students when making a decision to study in Thailand/ Australia*

Hypothesis 2 *The higher the expectation of an higher education institution characteristic, the greater the influence it has on international students when making a decision to study in Thailand/Australia*

Hypothesis 3 *The higher the expectation of a country characteristic, the greater the influence it has on international students when making a decision to study in Thailand/Australia*

Hypothesis 4 *When international students make a decision to enrol at HEIs in Thailand/Australia, they perceive that study in Thailand/Australia provides them high benefits*

Hypothesis 5 *When international students make a decision to enrol at HEIs in Thailand/Australia, they are aware of the risks of studying abroad*

Hypothesis 6 *When international students are studying at HEIs in Thailand/Australia, they perceive that the benefits of study in Thailand/Australia are acceptable when compared to their perception of the benefits before they started studying*

Hypothesis 7 *When international students are studying at HEIs in Thailand/Australia, they perceive that risks of study in Thailand/Australia are manageable when compared to their perception of the risks before they started studying*

Hypothesis 8 *International students have a positive perception (their expectations have been met) towards the characteristics of the HEI after they have enrolled in their course in Thailand/Australia*

Hypothesis 9 *International students have a positive perception (their expectations have been met) towards the characteristics of the country (Thailand/Australia) they chose as their destination for study abroad*

Hypothesis 10 *International students in Thailand/Australia eventually confirm the value of the international higher education service (at the confirmation/disconfirmation stage) offered by HEIs in Thailand/Australia (during their study) by intending to complete their studies.*

2.11 Summary

The review of the literature for this study focused on the general background of the international higher education service in Australia and in Thailand, the trends and strategies for expansion of the international higher education service and factors affecting international students in selecting a place for their study abroad. The concepts of innovation and the innovation decision process were also presented as the framework of this study.

The international higher education service in Australia has emerged since the 1950s from "aid programmes" for overseas students through the Colombo Plan (Wick, 1972). The policy on overseas students in Australia has been changed from "aid" to "trade" after the new overseas students policy was announced in March 1985 (Nesdale et al., 1995). The change of policy on overseas students positively affected Australia's entry to the international higher education service market (Harris and Jarrett, 1990). The international higher education service in Australia has grown steadily. It has contributed high revenue for the Australian economy reaching approximately $4.2 billion in the first six months of 2003 (IDP, 2003a).

In Thailand, the development of higher education can be divided into three eras: the Early Modernisation era (1889 to 1931), the Post-Revolution era (1932 to 1949) and the

Development Planning era (1950 to present). The international higher education service in Thailand has emerged since the 1960s in the Development Planning era. Thailand has attempted to be a centre of higher education among neighboring countries and the venture is expected to be a source of funds to increase the country's revenue (Thaitieng, 2001). The international higher education service brings approximately 2,171 million Baht per year to the Thai economy. It is also expected that the national revenue from this service will increase to 2,481 million Baht in the year of 2003. Strategies for expanding the international higher education service were reviewed in this chapter based on Australia's experiences. Three main strategies: going offshore, strategic alliance twinning programmes and promotion strategies were identified from existing studies as keys strategies to expand the international higher education service to target markets.

In addition, factors affecting international students when making a decision to study abroad were discussed by gathering information from existing studies. The five main groups of critical factors were identified: HEI characteristics, country characteristics, sources of information, benefits and risks of study abroad. These factors were incorporated in the proposed model for this study. In this study, the international higher education service was identified as a new service (an innovation) for international students, who made a decision to study in Thailand and in Australia. Therefore, the Innovation Decision Process by Rogers (1995) was introduced and adapted for this study. "The International Students' Innovation Decision Process" was proposed and incorporates five main groups of critical factors to be tested with international students in Thailand and in Australia. Finally, the review of factors affecting international students when making a decision to study abroad and the innovation decision process has led to the proposed hypotheses for this study.

The next chapter will describe the research methodology of this study including ethical considerations, research design and the research instrument construction. The selection of participants, data collection methods, the difficulty of data collection, and statistical techniques used for this study will also be reviewed in the next chapter.

Chapter 3
Research Methodology

3.1 Introduction

This chapter describes the research design and the research methodology. The exploratory research for this study, the construction of research instruments, and the measurement of validity and reliability of research instruments are explained. In addition, the selection of participants, data collection methods and the difficulty of data collection methods are stated. Data editing and the statistical techniques for data analysis are provided. Finally, ethical considerations that maintain participants' rights and safety in the collection of data are discussed.

3.2 Research Design for this Study

This study uses both qualitative and quantitative techniques. The research design of this study consisted of six stages; exploratory research, research instrument construction, testing the research instruments, selection of participants and data collection methods, data editing and data analysis which are discussed as follows:

Stage 1 The Exploratory Research: in this stage, qualitative methods were used to gather data from both primary and secondary sources.

Stage 2 Research Instrument Construction: research instruments used for the qualitative and quantitative research methods in this study were constructed utilizing the information collected in the first stage. The self-administered questionnaire was developed to test a model of "the International Students' Innovation Decision Process" with international students in Thailand and in Australia. In-depth interview questions were developed for interviews with persons whose work is relevant to international students and the international higher education service in Thailand/Australia.

Stage 3 Validity and Reliability of Research Instruments: this stage involved testing the validity and reliability of the research instruments developed in the second stage.

Stage 4 Selection of Participants and Data Collection Methods: this stage involved selection of participants, and sampling techniques used for the qualitative and quantitative phase of this study. This stage also involved selection of the data collection methods used to gather data from persons who were involved with international students and the international higher education service and also from international students in Thailand and in Australia.

Stage 5 Data Editing: after data collection of the quantitative research, questionnaires were checked and edited to ensure completeness before data entry and analysis.

Stage 6 Data Analysis: the seventh stage involved data analysis using selected statistical techniques.

The details of each stage of the research design for this study are discussed in section 3.4 and a summary of research methodology used for this study is presented in Figure 3.1.

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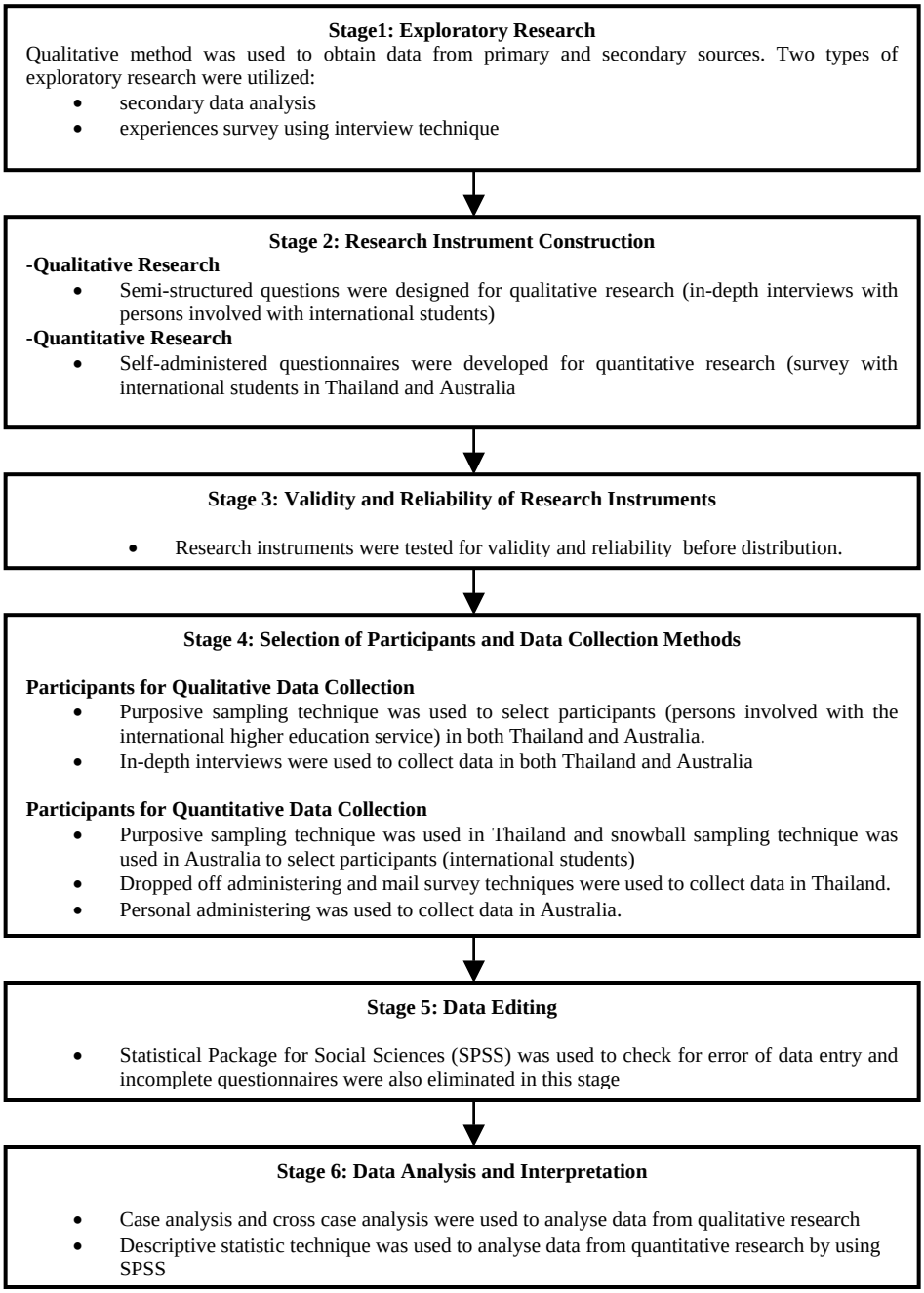
Figure 3.1 The Summary of Research Methodology for this Study



3.3 Choice of Research methods

There are two main research approaches commonly used in business research areas: qualitative and quantitative methods. Qualitative research has been criticized for a lack of reliability and validity and for the production of soft data compared to quantitative methods (Gordon and Langmaid 1993). Qualitative and quantitative methods both have their strengths and weaknesses. They can both be developed and designed to complement each other in order to achieve the best results within the same project. The strengths of one can compensate for the weaknesses of the other. Table 3.1 summarises the respective strengths of qualitative and quantitative research.

Table 3.1: The Strengths of Qualitative and Quantitative Research

Qualitative	Quantitative
• Open-ended, dynamic, flexible. • Provides depth of understanding. • Taps consumer creativity. • Provides a database that is broader and deeper. • Penetrates rationalized or superficial responses. • Provides a richer source of ideas for marketing and creative teams	• Requires statistical and numerical measurement. • Sub-group sampling or comparisons. • Involves survey which can be repeated in the future and results compared. • Taps individual responses. • Less dependent on research executive skills or orientation.

Source: Gordon, W. and Langmaid, R. 1993, p.3.

Qualitative Research for this Study

Qualitative research is sometimes called “naturalistic inquiry” (Lincoln and Guba, 1985). The general conditions of inquiry are natural and have to be accepted as they are discovered. The main objective of qualitative research is finding ideas that lead to the new knowledge (Sherman and Webb, 1988). Gordon and Langmaid (1993) stated that qualitative research is used to expand knowledge, clarify the real issue, increase understanding of the research topic and create hypotheses. Qualitative data can be collected from either non human sources or human sources (Lincoln and Guba, 1985) both of which were used in this study.

Gordon and Langmaid (1993) classified basic qualitative methods into two approaches: the group discussion and the in-depth interview. They have compared the advantages and disadvantages of both methods as summarised in Table 3.2 and 3.3.

Table 3.2 The Advantages of the Group Discussion and the In-Depth Interview

The group discussion	The in-depth interview
• The spontaneous response is supported in a group. • The cultural and social influences on behavior and attitudes of members in a group are emphasized. • Members of a research team can observe groups to find out attitudes and reaction of members in groups. • Experiences of one person can inspire others. • The group environment puts participants under less pressure than the in-depth interview	• Information can be gathered in depth of detail on one interviewee at a time. • Individual ideas are not under pressure from others so both majority and minority points of view can be obtained. • There is no pressure from other members in a group. • Interviewees can be selected who are likely to have answers to the questions. • There is no difficulty for recruitment.

Source: Gordon, W. and Langmaid, R. 1993, pp.10-16.

Table 3.3 The Disadvantages of the Group Discussion and the In-Depth Interview

The group discussion	The in-depth interview
• A strong personality of some participants in a group may intimidate other members. • Members in a group may have negative reaction to the moderator. • Minority opinions may be lost while conducting the discussion.	• It is costly. • Takes time for the collection, interpretation and analysis of data. • There are geographical limits

Source: Gordon, W. and Langmaid, R. 1993, pp.10-16

Advantages and disadvantages of the group discussion and the in-depth interview were compared and the in-depth interview was chosen for the collection of data for this study because this study needed individual ideas from interviewees both majority and minority points of view and it also provided a chance to get more feedback about international education service from interviewees in Thailand and in Australia.

Qualitative Research for this Study

Qualitative research method was used in two stages for this study. It was first utilized to obtain data from primary source (experiences survey using the in-depth interview

technique) (see page 95). and secondary sources (secondary data analysis). Data from the exploratory research were gathered and analysed in order to construct research instruments for the survey of this study. Qualitative research method using the in-depth interview technique was also utilised in collecting data for the main survey in the fourth stage of this study.

The in-depth interview was chosen for this study because it provides a chance to get more feedback from respondents and usually receives a high response rate, even though it is costly, time consuming, and has geographical limits (Zikmund, 1997; Sekaran, 2000). The in-depth interview can be conducted face to face, door to door or over the telephone (Zikmund, 1997). It can be structured or unstructured (Sekaran, 2000). In structured interviews, respondents were asked the same questions in the same order delivered in the same standard (Punch, 1998) which may be called the *"standardized interview"* (Berg, 2001, p.69). Several studies about international education service such as those undertaken by Smart and Ang (1992, 1993, 1995) have used the in-depth interview for data gathering, nevertheless, they did not explain types of interviews in their studies.

Persons who were involved with the international higher education service of government departments (only in Thailand) and HEIs in Thailand and Australia that offered international higher education service were selected as respondents because it was expected that they could provide in-depth information about the international higher education service. In-depth interviews with persons involved with the international higher education service were conducted in each institution/government department to seek out critical successful strategies in approaching international students. Furthermore, the interview was planned to focus on trends in international education in each country from the international affairs officers' points of view. The interview results were expected to be useful in helping HEIs and the countries they operate in, particularly for Thailand, in planning strategies to attract more international students.

Quantitative Research for this Study

Quantitative research actually provides numerical measurements and enables comparison of items within a survey or between surveys that have been carried out at different times. By using research instruments, these measurements can be made and tested by different types of statistical techniques for validity and reliability (Gordon and Langmaid, 1993).

In order to investigate factors affecting international students in making a decision to study in Thailand and in Australia and to examine their intention to complete their studies, quantitative research was considered for this study. A questionnaire was used as the research instrument in this part of the study to test the proposed model of "the International Students' Innovation Decision Process" in Thailand and in Australia.

3.4 The Research Methodology for this Study

This study consists of six stages. The details of each stage of the research methodology for this study are discussed in this section:

3.4.1 Stage 1- The Exploratory Research

Exploratory research is normally used as the first stage of a research process. It is conducted to identify and clarify problems (Zikmund, 1997). Zikmund (2003) also claimed that exploratory research can help researchers reach a better understanding of the extent of the research problem. Similarly, Sekaran (2000) stated that the exploratory study is conducted to clarify the nature of the research problems. The main objective of the exploratory research is to narrow the scope of the study and to discover the research problems in order to specify research objectives (Churchill and Iacobucci, 2002). Zikmund (1997) stated that exploratory research is important and that most researchers used qualitative methods. It can help to clarify the concept of the research and researchers can gain in-depth details and ideas for their study (Churchill and Iacobucci 2002). Nevertheless, Zikmund (1997) claimed that there are some limitations, for

example it cannot provide quantitative measurements, the interpretation is based on a researcher's judgment and the sample is not representative of the population. Hence, the exploratory research was used as an initial stage for this study.

In this study, the exploratory research was used to gather and analyse data from primary and secondary sources in order to construct research instruments for the survey of this study.

Zikmund (1997) classified techniques for gaining clearer ideas of research problems into four basic categories: experience surveys, secondary data analysis, case study method and pilot study.

Secondary Data Analysis: is the method used to assemble data from various sources of documented information. Literature surveys of published articles, theories from text books and previous empirical studies which relate to the research projects were analysed to scope the framework of this study.

This technique is economical and can be used to gather data faster than other techniques (Churchill and Iacobucci, 2002). Disadvantages of secondary data analysis are that the data may be out-of-date and may not meet the needs of researchers because they may have been conducted with different objectives. However, secondary data have been accepted as of great value for exploratory studies. Secondary data analysis was chosen to use in this study because there are reliable previous studies investigated in international education service particularly in Australia. Further, theories from text books involving the decision making process and the innovation decision process was investigated as important secondary data in order to set the framework of this study.

Experience Survey: which is sometimes called "key informant survey" (Churchill, 1996). It is a technique in which interviews of a small number of people who are knowledgeable and experienced in the area of the research problems are undertaken. The aim of this technique is to identify and clarify problems of the project. Due to lack of

previous empirical studies in Thailand, the experience survey was chosen to use only in Thailand in order to gather more information about international education service from international education's experts. The experience survey's results from these experts were very helpful to scope and construct research instruments for the main survey of this study.

Pilot Study: this technique is used to gather primary data from a small number of respondents representative of the sample for the major survey. These representative respondents give ideas about the project and the results of the pilot study are used to recommend possible ideas for the main survey. The main techniques used for a pilot study include the focus group interview, projective techniques and the in-depth interview. A pilot study is a good method to seek out ideas and suggestions from respondents representative of the sample but it is costly and takes time for collecting and analyzing data (Zikmund, 1997) which was not appropriate for this study.

Case study: is a technique used to collect data from a few situations which are similar to the researcher's project. It is the intensive study of a sample that is selected according to the phenomenon of interest (Churchill, 1996). The results from a case study may not be reliable because each situation is different. Furthermore, it is very difficult to collect data with this method because researchers may have limited access to data from firms (Churchill and Iacobucci, 2002). Hence, this method was not used in this study because there was limited access to data from HEIs in both Thailand and Australia.

The details of secondary data analysis and experience survey used in this study are discussed in the following sections.

3.4.1.1 Secondary Data Analysis

The development of international education services in Thailand and in Australia was investigated. Factors affecting international students when making a decision to study abroad were assembled from different secondary sources of information such as text

books and international journals. The model of the innovation decision process (Rogers, 1995) was studied and adapted for the proposed model of “the International students’ Innovation Decision Process”.

3.4.1.2 The Experience Survey

In Australia, sufficient secondary data about the international higher education service were available to scope the framework of the study. However, this was not the case for Thailand. Therefore, the experience survey for this study was only conducted in Thailand due to the lack of previous research in this area. An experience survey was conducted in January 2001 with two persons, who had been involved with international students/international higher education service, one was the director of international affairs from a government run HEI and the other was the director of the international programme from a private HEI in Thailand. The objective of this experience survey was to investigate the directions of the international education service and to seek out factors which can attract international students to study in Thailand.

Suggestions from the Experience Survey

The experience survey of two professionals in Thailand suggested that international higher education service in Thailand has grown significantly since the Asian crisis in 1997. Both of the respondents concurred that some local students who wanted to go abroad for their studies changed their mind and elected to enrol at HEIs in Thailand which offered international programmes (delivered in English) due to financial problems. This affected the demand from local students who wished to study international programmes in Thailand. Therefore, HEIs in Thailand have attempted to offer international progrmmes in order to supply this demand. Both of the respondents also agreed that the major target students for their HEIs were still local (Thai) students, however their HEIs have started looking for students from other countries.

The professional from the state HEI stated that a problem in introducing this service to prospective students was that the Thai government did not have a visible policy to support the expansion of this service. In addition, there was a management problem within one of the organisations (HEI) in offering the international higher education service. The other professional, from a private HEI claimed that lack of research investigating the international higher education service area affected HEIs and the country in providing appropriate strategies to attract international students.

Both of the respondents also suggested that this project should investigate problems in offering an international higher education service because this service is very new for HEIs in Thailand. One of these professionals suggested that the in-depth interview should be conducted with government representatives in order to discover the government policy that supports the international higher education service. The respondents also commented about HEI characteristics affecting international students' decisions in choosing Thailand as a destination country. These include the standard and quality of programmes offered by HEIs in Thailand, the length of programmes, system of exemptions (or credit transfer), HEIs' facilities, an effective international department, helpful staff, scholarships and a counselling centre for international students. Characteristics of the country, for example culture, Thai food, political situation, low cost of living, good basic infrastructure such as public transportation, were also suggested as factors which might be of major consideration by international students in coming to study in Thailand. In addition, both respondents recommended that Thailand and its HEIs should provide information through effective communication channels in order to communicate with prospective international students. The Internet, Thai government representatives in overseas countries such as Thai embassies, education exhibitions and international students' sponsors should be appropriate sources for sending information to prospective international students.

Finally, one respondent stated that the number of international students from a wide range of countries who want to study in Thailand had increased rapidly in the last few years. This came about from those international students who believed that they could

gain some benefits from study in Thailand, for example increasing their international understanding, get overseas experience that was different from their home countries and earn more money after finishing the degree. This respondent also commented that due to Thailand not being an English speaking country, international students may, therefore, face a communication problem when they first arrived in Thailand.

Secondary data analysis and the experience surveys in the first stage helped to clarify research problems, helped to specify the scope of this study and generate ideas for creating the research instruments for testing the model and for the main survey of this study.

3.4.2 Stage 2 - Research Instruments Construction

Research instruments for this study were developed for the in-depth interviews (qualitative research) and for the survey with international students (quantitative research) in Thailand/Australia.

3.4.2.1 Research Instruments Used for the Qualitative Method

One of the objectives of this study was to develop appropriate strategies for HEIs in Thailand, which offer, and intend to expand, the international higher education service by using the results from in-depth interviews in both Thailand and in Australia. The results of the interviews in Australia were expected to be useful for Thailand in providing a service for prospective international students by learning from Australia's experiences.

The in-depth interview, using the structured interview technique (open-ended questions) was chosen for collecting qualitative data for this part of the study.

The interviewees were expected to contribute to the identification of trends in international education and marketing strategies for the business of international

education. Questions for the in-depth interview were developed from information assembled from the exploratory research. Two versions of the interview questions were constructed based on Australia's experience, one version for use in Australia and the other for use in Thailand (see Appendices 2 and 3) The objectives of the interview were to:

- Obtain general information about the international higher education service, the growth rate, and the forecasted demand for this service in both countries;
- Identify benefits and risks to the host countries, when offering international higher education to international students;
- Identify characteristics of international students of HEIs in Australia and Thailand;
- Investigate opportunities and the potential for Australia and Thailand to expand the international higher education service to target countries;
- Identify important factors which attracted international students to study in the host country from an academic point of view;
- Obtain information about appropriate marketing strategies in offering international programmes to international students;
- Identify policies from both countries which promote the international higher education services.

3.4.2.2 Research Instruments Used for the Quantitative Method

The research instrument used in this study was a self-administered questionnaire. The questionnaire was constructed to test the proposed model of "the International Students' Innovation Decision Process". Each service industry has its own unique features (Kivela, Reece and Inbakaran, 1999) and this also applies to the international higher education service. Therefore, the research instrument of this study was designed specifically for use with international students in Thailand and in Australia about their perceptions of studying abroad. The survey questionnaire was intended to discover:

- The importance of sources of information for international students to seek out information on study abroad;
- The expectations for HEIs and country characteristics;
- The influential sources of information, influential HEI characteristics and influential country characteristics, for international students in making a decision to enrol at HEIs in Thailand and in Australia;
- The benefits and risks that international students are concerned with when making a decision to enrol at HEIs in Thailand and in Australia;
- International students' experiences of HEIs and country characteristics in the destination country as well as their experiences in terms of benefits and risks of study abroad when they were studying in Thailand and in Australia;
- International students' intention to complete their studies in Thailand and in Australia.

To date, as far as the author is aware, there is no research instrument that had been developed for testing the "International Students' Innovation Decision Process. Thus, the format of the questionnaire developed for this study was adapted from the research instrument used in the hospitality area developed by Kivela, Reece, and Inbakaran (1999). Their research investigated consumer attitudes about the restaurant environment. Their research instrument was constructed using a 5-point scale to measure customer attitudes toward the restaurant environment before and after they received the service. Numerical 5-point scales are similar to semantic differential scales but use numbers as response options, rather than a semantic range (Zikmund, 1997). The numerical 5-point scale uses bipolar adjectives in the same way as the semantic differential scale but "the numerical labels for intermediate points on the scales is an effective a measure as the 'true' semantic differential" (Zikmund, 1997, p.361). The construction of a semantic differential scale begins with determination of a concept to be rated and a researcher chooses dichotomous pairs of phrases or words that can be used to describe the concept (McDaniel and Gates, 2002). The scale used for the first three sections of this questionnaire is called "a 5-point scale" and respondents were required to indicate the strength of their response by marking a number from 1 to 5. The five-point scale used in

this study is defined as an ordinal scale for measurement because the degree of distance between the objects of the attitude test cannot be measured (Saengkaew, 2001; Boonnak, 2001; Chaichan, 2003)

In order to test the proposed model of "the International Students' Innovation Decision Process", the questionnaire for this study consisted of four main sections. In the first three sections, a 5-points scale was used to identify response positions while in the final section a nominal scale was used to identify the background of respondents.

The first section of the questionnaire investigated the importance and influence of sources of information used by international students when making a decision to study abroad. The 5-point scale was set out from 1 = not important to 5 = very important and 1 = not influential to 5 = very influential.

In the second section, the international students' assessment of the benefits and risks of studying abroad when they were making a decision to study in Thailand/Australia and when they were studying in those countries were investigated. The 5-point scale of this section was indicated from 1 = no benefit to 5 = very high benefit and from 1 = no risk to 5 = very high risk

The third section was used to assess international students' expectations and the influence of HEI and country characteristics when making a decision to study in Thailand and in Australia. The 5-point scale of this section was set out from 1 = low expectation to 5 = high expectation. In addition, international students were requested to evaluate their experiences of HEIs and country characteristics when they were studying at HEIs in those countries. The 5-points scale used to examine international students' experiences about HEI and country characteristics was set out from 1 = has not met my expectation to 5 = has met my expectation.

The final section was designed to determine international students' intention for continuing to complete their study in Thailand and in Australia. In addition, their

background including gender, their home country, the degree/programme, discipline areas and HEI in which they were enrolled were identified in this section. Furthermore, their first choice of country for study abroad and the final reasons which led them to make a decision to enrol at an HEI in Thailand/Australia were specified. A nominal scale was used in this section in order to identify and classify the difference between international students in both countries.

The questionnaires for this study were constructed in the English language for use in Thailand and in Australia. The questionnaires were developed by utilizing factors from previous studies and suggestions from the experience survey (in Thailand) and then constructed into two versions, one for use in Australia and the other one for use in Thailand (See Appendices 4 and 5**).**

3.5 Stage 3–Validity and Reliability of Research Instruments

In order to ensure the appropriateness of measures used in this study, the pre-test of research instruments was used to examine validity and reliability of questions before conducting the main survey. In this study, validity and reliability tests were used to test both qualitative and quantitative research instruments.

3.5.1 The Test of Validity

After building the model, constructing research instruments and selecting the participants, it is necessary to assure that participants understand all of the questions in the research instrument. This is usually called the “validity” of the instrument (Nunnally, 1978). However, Sekaran (2000) classified types of validity into three groups: content validity (face validity), criterion-related validity and construct validity.

Content Validity (Face Validity): an instrument is considered to have content validity if it provides clear and understandable questions and covers the concept of the study

(Zikmund, 1997). Content validity of an instrument can be approved by professionals involved in the area covered by the project.

Criterion-Related Validity: this can be classified as concurrent validity or as predictive validity. Concurrent validity applies when a new measurement is investigated at the same time as standard measures. Predictive validity applies when a new measure predicts a future situation or relates to measurements taken at a later time. Zikmund (1997) stated that criterion validity provides a stronger empirical test than content validity. However, the objective of each study is different hence, criterion-related validity cannot validate every test and each test has its criterion of performance (Nunnally, 1978).

Construct Validity: can be applied in order to assure that the measurement is appropriate for testing the hypotheses and originating from the underlying theories on which the study is based (Zikmund, 1997).

3.5.1.1 Selection of Tests of Validity of the Qualitative and Quantitative Components of this Study

It has been mentioned earlier that to the best of the author's knowledge, there has been no research instrument that has been developed to test the model of "the International Students' Innovation Decision Process". Therefore, content validity (face validity) was decided upon as the most appropriate method for pre-testing of both the qualitative and quantitative research instruments of this study even though it provides less precise information than criterion-related validity. Content validity (face validity) of this study was checked by discussing the interview questions (qualitative method) and the content of the questionnaire (quantitative method) with two persons in Thailand, who were involved with the international higher education service in order to confirm that these instruments were suitable for this study. Ahmadi, Helms and Raiszadeh (2001) used content validity in their study of "Business Students' Perceptions of Faculty

Evaluations". They involved four academic professionals in checking content validity of the research instrument in order to assure appropriateness and clarity.

3.5.2 The Test of Reliability

The reliability tests give information about consistency and stability through a series of research measures (Cronbach, 1965). Reliability can be tested in both quantitative and qualitative research (Cohen, Manion and Morrison, 2000).

3.5.2.1 Reliability in Qualitative Research

Reliability tests for quantitative research may not work for qualitative research (LeCompte, Millroy and Preissle, 1992). Quantitative research presumes the probability of replication; if the same techniques are tested with the same group the test results should be the same but it is different for qualitative research. Reliability testing in qualitative research can be approached in three different ways: stability of observations, inter-rater reliability and parallel form (Denzin and Lincoln, 1994).

Stability of Observations: if researchers make observations in a different place or at a different time they should be the same.

Inter-Rater Reliability: if researchers use the same theoretical framework and make observations under the same circumstances the results should be the same.

Parallel form: if researchers investigate more than one group during their observations they should make the same observations and interpretations of what they do. In order to control the reliability of qualitative research for in-depth interviews, it is necessary to have an appropriate structured interview with the same questions, the same layout and the same order of wording (Silverman, 1993).

Silverman (1993) also suggested that the reliability of the interview can be increased by emphasis on inter-rater reliability with a highly structured interview using the same format, same questions and sequence of wording for each respondent.

In this study, parallel form was used to increase the reliability of the interview. In-depth interview questions were developed in two versions, one used in Australia and the other one used in Thailand (See Appendices 2 and 3). In-depth interviews were conducted with persons involved with international higher education service, using the same format, same questions and order of wording for each respondent in Thailand. This was also done in Australia by using the same technique. Using this technique can ensure that all interviews are conducted in the same direction, answer research questions and achieve the research objectives.

3.5.2.2 Reliability in Quantitative Research

The reliability of measure refers to the extent that the measurement process is free from error (Garrett, 1966; Kinnear and Taylor, 1996). Reliability can be classified into two dimensions: stability and consistency (Sekaran, 2000).

The Test of Stability: the stability of a measure is the ability to maintain stability of a research instrument over a period of time in order to assure its stability when used in a different situation. Two types of the test of stability are considered, test-retest and parallel-form reliability (Sekaran, 2000). The test-retest reliability technique involves a test of the same measure for the same participants at two different times in order to test for the stability of the research instrument (Sekaran, 2000). If the measure is stable over time, results of both tests should be similar. A problem of test-retest reliability is that the first measure may be sensitive to participants, which may affect the results of the second test. Moreover, if the period between the two tests is long, participant attitudes may change (Zikmund, 1997). Parallel-form reliability engages with two comparable sets of the measure. Both sets have similar item response layouts but wording and ordering of questions are changed (Sekaran, 2000). If two comparable sets are highly correlated it

can be assumed that the measure is reliable with minimum error from ordering words and other factors.

The Test of Internal Consistency: the second dimension of reliability involves the homogeneity of the measures. For the measurement of attitude it may be necessary to ask various similar questions or a group of scale items. In order to confirm the internal consistency of multiple items, scores on subgroups of items in the research instrument should be highly correlated (Zikmund, 2003). This can be tested through the split-half method and inter-item consistency.

The split-half technique measures the correlation of internal consistency between two halves of the scaled items of an instrument. It is used to measure dependency of variables, which are split in two halves (Sekaran, 2000). The inter-Item Consistency Reliability technique is used to check all items in a measure. Independent items should be measured on the same concept and correlate with one another. The most popular technique for testing internal consistency is Cronbach's Coefficient Alpha. It was formulated by Lee J. Cronbach in 1951 to assess the quality of research instruments (Churchill, 1979). Cronbach's alpha is used to test multi-item scales, the higher the score of the test (close to 1) the higher the reliability of the instrument (Sekaran, 2000).

In this study, inter-item consistency reliability was used to test reliability of the research instrument because the questionnaire utilised multi-item scales and it has been used in previous service quality studies. Cronbach's Coefficient Alpha has been used by Asubonteng, McCleary and Swan (1996) in their study of service quality, as well as Kivela, Reece and Inbakaran (1999) in their study of consumer satisfaction in the restaurant environment. Thus, the test of internal consistency (inter-item consistency reliability) was used in this study to test the reliability of the research instrument (questionnaires used for testing the model for this study).

3.5.2.3 Pre-Test of the Questionnaire for Quantitative Research

"Data collection should never begin without an adequate pretest of the questionnaire" (Churchill, 1996, p.371). The pre-test is the use of questionnaires on a trial basis on a small number of respondents to check question content, wording, sequence, layout and any flaws in the questionnaire so that all corrections that are necessary can be made before the real survey (Malhotra, 1999). The objective of the pre-test of the questionnaire for this study is to assure that questions are clear, understandable and reliable for respondents.

Malhotra (1996) suggested that respondents from the pre-test and real survey should be chosen from the same population. Therefore, the pre-test of this study was conducted on thirty (30) international students who were enrolled at HEIs in Thailand by dropping questionnaires at two HEIs which participated in the exploratory research (See section 3.4.1.2, p. 95). Questionnaires were also distributed to fifty (50) international students who enrolled at HEIs in Melbourne by using convenience sampling technique.

Results of the Pre-Test

Cronbach's Coefficient Alpha test was used to test the internal consistency of the questionnaire in order to check the reliability of questions. In the first three sections of the questionnaire, questions were constructed using multi-item scales which can be tested by Cronbach's Coefficient Alpha. Data from the fifty completed questionnaires collected from international students in Australia and thirty-three completed questionnaires from international students in Thailand were used for the inter-item consistency reliability test. Variables in the questionnaire were named and coded by a process called "defining the variables" (Pallant, 2001) before data entry. The Statistical Package for the Social Sciences, Windows version 10.0 (SPSS 10.0) was used for data analysis to test the reliability of the questionnaire. The results of the inter-item consistency test for both countries are shown in Tables 3.4. and 3.5.

Table 3.4 Results of Cronbach's Coefficient Alpha Reliability Test (Australia)

Section	Number of items	Cronbach's Coefficient Alpha
Section 1		
A. Source of Information (Important)	11	.76
B. Source of Information (Influential)	11	.86
Section 2		
A. Benefits before	5	.72
B. Benefits now	5	.76
C. Risk before	5	.77
D. Risk now	5	.81
Section 3		
A. HEI characteristics (expectation)	14	.90
B. HEI characteristics (influence)	14	.80
C. Country characteristics (expectation)	10	.77
D. Country characteristics (influence)	10	.84
E. Higher Education characteristics (met expectation)	14	.92
F. Country characteristics (met expectation)	10	.86

N = 50

Table 3.5 Results of Cronbach's Coefficient Alpha Reliability Test (Thailand)

Section	Number of items	Cronbach's Coefficient Alpha
Section 1		
A. Source of Information [Important]	10	.91
B. Source of Information [Influential]	10	.87
Section 2		
A. Benefits before	4	.68
B. Benefits now	4	.76
C. Risk before	6	.69
D. Risk now	6	.75
Section 3		
A. HEI (expectation)	14	.81
B. HEI (influence)	14	.69
C. Country characteristics (expectation)	10	.62
D. Country characteristics (influence)	10	.77
E. Higher Education characteristics (met expectation)	14	.90
F. Country characteristics (met expectation)	10	.65

N = 33

Cronbach's Coefficient Alpha scores can indicate the correlation of items of the research instrument (Nunnally, 1978). If Cronbach's Coefficient Alpha is low, the instrument should be reconsidered. The score of alpha depends on various factors such as the number of items, the sample size (Nunnally, 1978) and the purpose of the research (Churchill, 1979). Kaplan and Saccuzzo (2001) suggested that, generally, if Cronbach's Coefficient Alpha value exceeds .60 the reliability of the questionnaire is confirmed. The test of reliability for this study was tested in a form of total variable score that can be used to examine the reliability of the questionnaire (Pallant, 2001). For the results of

this test, Cronbach's Coefficient Alpha range for the sample is from .72 to .92 (in Australia) and from .62 to .91 (in Thailand), so it can be confirmed that the research instrument of this study is satisfactory for use in the main survey.

Although the test of reliability of the questionnaire is satisfactory, several questions were revised following respondents' comments in order to make questions clearer. Therefore, two questions needed modification in order to make them clear before conducting the main survey. Firstly, in section 1, one more choice was added to each part (A and B), sources of information, which were important to persuade and were influential to lead international students in making a decision to study abroad. In these parts (A and B) if international students did not use any sources of information, they were asked to tick "did not use" and so there would be no need to rate the sources. The reason for modification is that some international students had never used some of the sources of information, therefore they could not answer these questions. Secondly, for question 1 in section 4, "Will you continue your course until you complete your degree?" was changed to "Will you continue your course until you complete your degree/programme?" The reason for this alteration is that exchange students may not graduate with a "degree" from institutions abroad they may only complete the "programme" under the agreement of the destination country. Revised questionnaires used in Australia and in Thailand are provided in Appendices 6 and 7.

3.6 Stage 4- Selection of Participants and Data Collection Methods

In order to collect data for this study, participants were selected utilising a sampling technique. The terminology of "sampling" involves the process of choosing a small percentage of the whole population as its representatives (Zikmund, 1997). The population for this study is separated into two main groups;

- Persons involved with the international higher education service in Thailand and in Australia (Melbourne) for the in-depth interviews.
- International students in Thailand and in Australia (Melbourne) for the questionnaire survey.

Sampling techniques, data collection method and sample size issues are discussed in section 3.6.1, 3.6.2 and 3.6.3. Selection of participants, data collection methods and sample size for this study are discussed in section 3.8

3.6.1 Sampling Techniques

The two main types of sampling techniques are: probability and non-probability techniques. For probability sampling all units in the population have the same chance of being chosen as part of the sample. For non-probability sampling the units do not have an equal chance of being chosen as part of the sample (Sekaran, 2000). The characteristics of these two techniques including advantages and disadvantages are summarised in Tables 3.6 and 3.7.

Table 3.6 Probability Sampling Techniques

Probability Sampling Techniques		
Description	**Advantages**	**Disadvantages**
1. Sample Random Sampling Each unit in the population has an equal chance of being selected in the sample	-Easy to analyse data	-Not as efficient as stratified sampling. -High cost.
2. Systematic Sampling A beginning point is chosen by a random process and then every *n*th unit in the population is selected.	-Easy to use if the population frame is available.	-If the sampling interval involves a periodic ordering of the population, it is possible that bias will be increased.
3. Stratified Sampling The population is divided into subgroups and thereafter subjects are selected for the sample from within the different subgroups.	-Sampling error can be reduced because characteristics of members within the groups are consistent but they are different between groups. -Low cost	- It takes more time than the simple or systematic sampling techniques.
4. Cluster Sampling Members in a group are different and members in each group are selected randomly.	-It is an economically efficient technique. -Low cost	-Bigger error for comparable size than other probability sampling.
5. Multi Stage Sampling This technique involves with combination of two or more steps of the probability techniques and frequently used in national-wide surveys.	- Offers more details about the topic of the project.	-High cost

Source: Sekaran (2000, p.281);
Zikmund (1997, pp.440-441)

Table 3.7 Non-Probability Sampling Techniques

Non-Probability Sampling Techniques		
Description	**Advantages**	**Disadvantages**
1 .Convenience Sampling Used for collecting the data for a large survey.	-It is the easiest way to reach members who are selected for the sample. -It can be done quickly and cost effectively.	-It cannot measure or control variability and bias.
2. Judgment or Purposive Sampling Involves choosing respondents based on characteristics required. Researchers choose a sample to support a specific objective of their studies.	-Sample guaranteed to meet researchers' specific aims.	-Bias may occur from experts beliefs, which may take a sample un-representative.
3. Quota Sampling Sample is chosen from target groups according to a quota.	-Very extensive use. - No need for a list of population	- There is bias in researchers' classification of sample.
4. Snowball Sampling The first respondent is identified from a small number of individuals who have the characteristics in which researchers are interested but thereafter more respondents are chosen from information given by the first sample.	- It is useful for sampling a population, which is difficult to access	- Bias may occur because the sample is not dependent.

Source: Sekaran (2000, p.281)

Zikmund (1997, pp. 440 – 441)

Cohen, Manion and Morrison (2000, pp.102-104)

The sampling techniques for qualitative and quantitative research used in this study are discussed in section 3.6.4.

3.6.2 Data Collection Methods

Data can be collected by a variety of techniques. The methods of data collection include interviews that are either telephone interviews, face-to face interviews or computer-assisted interviews; questionnaires that are electronically administered, personally administered or mailed (Sekaran, 2000). Data can be collected by any one of the aforementioned methods or can be gathered by dropping off questionnaires at a central location (Zikmund, 1997). Table 3.8 provides basic data collection methods for communication with respondents.

Table 3.8 Data Collection Methods for Communication with Respondents.

Data Collection Methods		
Description	**Advantages**	**Disadvantages**
1. Personal Interview It is face to face communication and can be done at respondents' home or their office.	- Gives the opportunity for direct feedback from interviewees. - Can be conducted longer than telephone interview - All questions are completed.	- It is costly and takes time. - It is difficult to make contact with interviewees.
2. Telephone Interview It is an important technique and the quality of collected data can be comparable to personal interview.	- It is quick for collecting data. - Less time consuming. -Lower cost than personal interview.	- There is a problem in obtaining a representative sampling frame because all telephone numbers are not listed in the directories.
3. Mail Survey The questionnaire is sent to a respondent by the mail.	-Low cost when compare to an interview. - Convenient for respondents - Covers a large area. - No interviewer bias - Use for long questionnaire	- Low response rate. - Lack of control over respondents
4.Computer Interactive survey (online survey) It is the method to collect display questionnaire on the computer screen.	- It is the ability of computer in arranging the sequence of questions	-Not everyone can access a computer. - No opportunity for asking open-ended question - Complicated questionnaire cannot be handled through this medium
5. Dropped off Administering The questionnaire is distributed by using the people at a center location, for example international students offices, to deliver questionnaire to respondents.	- Low cost and quick.	-Sometimes, there is no cooperation from people in the centre locations.
6. Personal Administering It is a good alternative to distributing questionnaires to respondents by researchers or members of the research team.	- It can be collected in a short period.	- It is costly if sample are dispersed in different areas.

Source: Sekaran (2000, pp.258-259)
Zikmund (1997, pp.243-258)
Proctor (2000, p.117, p.125)

The data collection methods for qualitative and quantitative research used in this study are discussed in section 3.6.4.

3.6.3 Sample Size

Malhotra (1999) stated that determining the sample size is very complicated and involves several quantitative and qualitative considerations. These considerations include the importance of the decision, the nature of research, the number of variables, the nature of the analysis, sample size used in similar studies, incidence rates, completion rates and resource constraints (Malhotra, 1999). The population, sample size, selection of participants, sampling techniques and data collection methods of this study are discussed in section 3.6.4.

3.6.4 Selection of Participants, Sampling Techniques and Data Collection Methods for this Study

The population, sample size, selection of participants, sampling techniques and data collection methods for this study is provided into two parts. The first part involving qualitative research, covers participants for the in-depth interviews with persons involved with the international higher education service in Thailand and in Australia. The second part involving quantitative research, covers participants for the survey involving international students who were enrolled at HEIs in Thailand and in Australia.

3.6.4.1 Qualitative Research

The sampling frame is a list of sampling units from a sample, which is selected and it can consist of geographical areas or other features (Churchill and Iacobucci, 2002). The sample frame for the qualitative research of this study was HEIs in Thailand and in Australia (Melbourne) that provided international higher education service to international students. The purposive sampling technique was used to choose the sample in Thailand and in Australia based on the characteristics (HEIs in Thailand and in Melbourne that provided international higher education service and delivered in English) requirement of the study. This technique assured that all participants met the researcher's specific aim.

In-depth interview was chosen as a method for data collection in qualitative research of this study. An in-depth interview can be conducted in two main ways: by personal interview or the telephone (Zikmund, 1997). They can be structured or unstructured (Sekaran, 2000). Several studies in the international higher education service area have used the in-depth interview for gathering data, for example Smart and Ang's (1992, 1993) study for market opportunity for Australian HEIs in Singapore and Hong Kong and also their study for enhancing Australia's recruitment of international students in Taiwan (Smart and Ang, 1995). However, they did not indicate the types of questions they used for their interviews.

The in-depth interviews of this study involved collecting data from persons who are involved with the international higher education service (See positions which interviewees were held in Table 3.9, p. 117 and Table 3.10, P.118) in HEIs, which offered international programmes, in Thailand and in Australia. In-depth interviews were conducted in each institution to seek out critical success policies associated with international programmes in approaching international students. Furthermore, the interview focused on trends in international education in each country from the international affairs officers' perspectives. The interview results were used to assist in the identification factors to identify factors affecting international students in making a decision to study in Thailand and in Australia (Melbourne). Moreover, the findings from the in-depth interviews were also used to assist in the development of appropriate strategies for HEIs in Thailand to attract more international students by learning from the experiences of Australia in offering the international higher education services to international students.

In-depth Interviews in Thailand

In Thailand, the qualitative research was conducted with autonomous (independent) HEIs, state and private HEIs under MUA that had provided international higher education service and international programmes using the English language as a medium of instruction. In addition, the qualitative survey also investigated two government departments, which were involved directly with international higher education service. Personal interviews were conducted at HEIs in Bangkok and bordering provinces. Due to time and budget limitations, telephone interviews were used for HEIs located in provinces that are beyond the borders of Bangkok. Interview request letters were sent to the total population of 37 HEIs under the MUA in Thailand and to two autonomous HEIs that offer international programs (MUA, 2001). In addition, request letters were posted to two government departments[1]. One of the government departments has direct responsibility to approve and control the quality of international programmes offered by

[1] The names of the two government departments may not be provided for reasons of confidentiality.

Thai HEIs. The other has taken the responsibility of promoting the international programmes offered by Thai HEIs to international students from target countries.

In-depth Interviews in Australia

In Australia, personal in-depth interviews were conducted only at HEIs that have their main campuses in Melbourne, due to budget and time constraints as well as the large area of the country. Therefore, interview request letters were sent to the total population of seven HEIs that have their main campuses in the Melbourne area.

After sending the request letters in both countries, telephone calls were made to respondents who had replied to the first request letter and granted permission for in-depth interviews in order to make an appointment. The first follow-up letters were sent to HEIs that did not reply to the first letter within one month. The second follow-up letters and electronic mail were sent to HEIs that did not reply to the first follow-up letter.

This study was conducted in two countries, thus it took time to conduct in-depth interviews and it was also very difficult to contact prospective samples for in-depth interviews. The details of the timeline for data collection in both countries are provided in Table 3.9, page 127 of this thesis and the interview request letter is shown in Appendices 7 and 8.

The in-depth interviews were conducted in the English language in Australia and in either English or Thai in Thailand, depending upon interviewees' nationality. The interview questions in the Thai language were used to conduct in-depth interviews with Thai respondents. The interview questions were translated by a researcher and were checked by two academic persons of a private HEI in Thailand (see Appendix 10). In-depth interviews were tape recorded and then transcribed in English.

3.6.4.2 Quantitative Research

The sample frame for the quantitative research of this study was international students, who were enroled at HEIs in Thailand and in Australia (Melbourne). Data collection methods are traded off strengths and weaknesses. Mail survey was chosen as a data collection method for this study because it was low cost, no interviewer bias and appropriate for the length of the questionnaire used in this study. Moreover, this method was used in many previous studies in the same area (BIE 1989; Gardiner, 1990; Steward and Felicetti, 1991; Mullin and Hancock, 1995; Nesdale et al. 1995; Joseph and Joseph, 2000; Pimpa, 2001; AEI, 2003b). Although major weakness of mail survey is low of response rate rewards were provided in order to motivate participants in returning questionnaires.

A request for participation was made to HEIs in both countries in order to obtain international students' contact details. Request letters for international students' contact details were sent to 37 HEIs under the MUA in Thailand and two autonomous HEIs that offer international programs (MUA, 2001). Over the period of collecting data (late 2001 to early 2002), the total population of international students who were enrolled at HEIs in Thailand was approximately 2,240 (DEP, 2002a). Request letters for international students' contact details was also sent for seven (7) HEIs in Melbourne. Over the period of collecting data in Australia (late 2001 to early 2002) the total population of international students who were enrolled at HEIs (included the University of Ballarat) in Victoria (onshore studying) was approximately 22,000 (AEI, 2001).

After sending the request letter in both countries, the first follow-up letters were sent to HEIs that did not reply to the first letter within one month. The second follow-up letters were electronic mail that were sent to HEIs that did not reply to the first follow-up letter. The request letter for international students' contact details is shown in Appendix 11.
Therefore, quantitative research for this study initially involved two sampling techniques. At the first stage, the purposive sampling technique was considered based on permission from HEIs in Thailand and in Australia in order to reach international who were enrolled at HEIs as onshore students in both countries. For the second stage, a

random sampling technique was chosen to select a sample (international students) from each HEI in order to assure that all sampling units (all international students) would have a chance to be part of the sample. Further, the mail survey technique was initially utilized for the return of the questionnaires for this study because it covered a large area, and was convenient for respondents. The questionnaires were distributed from each participating HEI and returned by the respondents from their homes. It was also appropriate for the length of the questionnaire.

3.7 Limitations of Data Collection for this Study

The main obstacle of data collection was the difficulty in obtaining permission from HEIs in both countries to gain access to contact details of their international students and also for in-depth interviews with persons involved with the international higher education service. Interview request letters and request letters for international students' contact details were posted to the HEIs that offered international higher education service in both countries. Two follow-up letters and electronic mailings were sent to HEIs that did not reply to the first request. In addition, electronic mailings were also sent to approach HEIs, which did not reply to the first three letters. The process of obtaining permission took three months in Thailand (November 2001-January 2002) and five months in Australia (December 2001- April 2002).

In Thailand, five HEIs declined to participate in this project for different reasons. Three of these HEIs declined to participate in this project on the basis that their HEIs were at the beginning stage in offering international higher education service. In addition, there were only two or three international students enrolled at their HEIs during the time that the research was conducted, thus they could not give sufficient information. One of the HEIs in Thailand refused to participate because the time that this project was being undertaken was the busiest period for that HEI. The last HEI that declined to participate in this project argued that this project is similar to an existing project being carried out at their HEI, therefore they did not give permission for either the in-depth interview or the survey with international students. In-depth interviews that were arranged failed in three

HEIs because interviewees forgot about the appointments and were too busy. There was no cooperation from twelve HEIs after sending three request letters, one electronic mail request and a telephone contact. Seventeen HEIs and one government department agreed to participate in the in-depth interviews. None of the HEIs that participated in the in-depth interviews could provide international student contact addresses due to confidentiality and privacy rule. Nevertheless, sixteen HEIs agreed to distribute questionnaires to the international students via their respective international offices. The remaining HEI did not have any international students (non-Thai nationality) enrolled at their HEI at the time the survey was conducted. Table 3.9 shows the positions and levels of the interviewees in this study which can confirm their expertise which involved with the international higher education service in Thailand.

Table 3.9 Position of interviewees in Thailand

Position of interviewee	Number of HEIs
Rector	5
Vice-rector for international affairs	7
Director of international college	2
Head of international affairs office	3
Head of international affairs department	1
Total	**18**

In Australia, the Information Privacy Act 2000 was proposed in December 2000 by the Victorian Government to take responsibility for handling and collecting personal information in the Victorian public sector (Department of Human Services, State Government of Victoria, 2003). This Act was announced on 1st September 2001 and covers all the Victorian public sectors. This was one of the reasons why there were difficulties in obtaining permission from HEIs in providing the contact details of their international students and also for in-depth interviews with persons involving the international higher education service. One of the HEIs declined to participate in this

project and there was no cooperation from two HEIs after sending three request letters, one electronic mail and making telephone contact.

Four HEIs agreed to participate with in-depth interviews, however they could not provide contact details of their students due to the confidentiality and privacy regulations. The researcher requested them to distribute questionnaires via the international offices of these four HEIs. One of them declined to distribute the material because their students were over surveyed and there was no cooperation from persons involved with the international students database in the remaining three HEIs. Table 3.10 presents the positions and levels of the interviewees in this study which can confirm their expertise which involved with the international higher education service in Australia.

Table 3.10 Position of interviewees in Australia

Position of interviewee	Number of HEIs
Pro Vice Chancellor (International)	1
Board of Director, ***International Pty. Ltd.	1
Executive Director, ***International	1
Manager of International Affairs Office	1
Total	**4**

*** The names of the HEIs may not be provided for reasons of confidentiality.

3.7.1 Method for Selection of Participants and Data Collection Methods for Quantitative Research

Owing to a lack of cooperation from HEIs in both countries in providing their international students contact details, as well as a lack of cooperation in distributing questionnaires, as discussed earlier, alternative methods of selection of participants and data collection methods were carried out, as discussed in this section. In addition, to increase the number of completed questionnaires, rewards were provided for

respondents who completed the questionnaire in both countries. This technique was also used by Aldrige and Rawly (1998) in their study of "Measuring customers satisfaction in higher education".

In Thailand

The purposive sampling technique was employed to select participants in Thailand. The "dropped off" technique was used for distribution of the questionnaires and the "mail survey" technique was used to receive returned questionnaires.

Questionnaires were delivered to the international affairs offices of sixteen institutions that had agreed to distribute questionnaires to the limited number of exchange or full time-full fees paying international students (non-Thai nationality). Therefore, one thousand one hundred and fifty-six (1,156) questionnaires were distributed to international students who enrolled at their HEIs during January and March 2002.

The questionnaires were distributed with a cover letter to each international student and reply-paid envelopes were provided to respondents to return the questionnaires. In order to increase the response rate of the survey, a cash prize of 5,000 Baht was awarded to two international students randomly selected from those who returned questionnaires within the time limitation. In addition, a small gift was awarded randomly to ten students.

With this technique, the researcher could not control effectiveness and the number of questionnaires, which were distributed by international offices in each HEI. This might have influenced the response rate and so become a limitation of this study.

In Australia

Owing to lack of cooperation from HEIs in Australia (Melbourne), it was necessary to use an alternative method to collect data from international students in Melbourne. Four hundred (400) questionnaires were provided for distribution to international students around Melbourne by the researcher. It was expected that the sample size would be between 200 and 300 over the allocated time. This sample size is similar to those used in previous studies involving international students (Gardiner and Hirst, 1990; Lawley, 1993; Mullins, Quintrell and Hancock, 1995). However, Hair et al. (1995) suggest that a sample size which exceeds 200-300 is acceptable Nevertheless, researchers should examine the significance of results in order to ensure that they have practical significance.

Since no permission had been granted from HEIs in Australia (Melbourne) to obtain data from international students, the "snowball" technique was used as an appropriate alternative method to select participants in Australia. This technique seeks to "identify a small number of individuals, who have the characteristics in which they (researchers) are interested" (Cohen, Manion and Morrison, 2000, p.104). Sampling by the snowball technique relies on the ability of researchers to locate an initial group of respondents with specific and desired characteristics (Churchill, 1996). Therefore, this technique was considered on the basis of specific international student characteristics, which were: a) they had to hold on overseas student visa; b) they could be exchange or full-time full-fees international students, who enrolled at one of the specific seven HEIs that have main campuses in Melbourne. Therefore, a small number of international students were identified, and they were used as informers to take the researcher to other international students who qualified for this study. The personal administering technique was used to collect data from these respondents.

Questionnaires were only distributed by using personal administering technique to international students aged over 18 years during April and June 2002. A cover letter was attached with the questionnaire to explain that their individual responses would be kept confidential and only a summary of the results would be reported in the thesis. If they decided to participate in this study they were required to provide separately their contact

details before returning the questionnaire to the researcher for a chance to receive a reward from the researcher. To increase the response rate, a cash prize of A$100 was given to each of two international students selected randomly and a small gift was awarded randomly to ten participants. However, it is difficult to get a large sample size by using a snowball sampling technique when the timeframe is limited. Therefore, the researcher considered this to be a limitation of the study. The response rates for the quantitative component of the research in both countries, and non-response issues are discussed in chapter 5.

3.8 Stage 5-Data Editing

The frequency procedure using the Statistical Package for Social Sciences Windows version 10.0 (SPSS 10.0) was run for all variables to check for errors of data entry. In order to ensure accuracy, consistency and reliability of the data, returned questionnaires were checked and edited for completeness. Incomplete questionnaires were classified into two groups: the first group contained questionnaires in which more than twenty-five percent of variables were not completed (Sekaran, 2000). Questionnaires in this group were excluded from the data analysis. The second group included incomplete questionnaires in which the number of variables without response was less than twenty-five percent, these were identified as having missing values in the data entry for the SPSS programme (Kinnear and Taylor, 1996; Sekaran, 2000).

3.9 Stage 6-Data Analysis

Both qualitative and quantitative research was used in this study. Qualitative data gathered from the in-depth interviews were analysed using the strategies of interview analysis suggested by Patton (1990) outlined in section 3.9.1. Descriptive and inferential statistics initially were used to analyse the quantitative data collected from the research instrument (questionnaire survey) with the use of the Statistical Package for the Social Sciences, Window version 10.0 (SPSS 10.0).

3.9.1 In-depth Interview

Goetz and LeCompete (1984) stated that qualitative method is a similar analytical process to other research forms but it can give more in-depth detail than quantitative statistical process. Nevertheless, there is no exact rule for the analysis of qualitative data. Patton (1990) has recommended that interview analysis be started by either case analysis or cross-case analysis.

In this study, case analysis of each interview was chosen as the starting point and this was followed by cross-case analysis (comparison of interviews). Further, interview data were related to objectives of the study and quotations were selected to support key ideas (Mariampolski, 2001). The raw data were transcribed from cassette tape and the results were initially written case by case. Cross-case analysis was then used by grouping answers from different interviewees and analyzing their viewpoints on the principal issues.

3.9.2 Survey Questionnaire

Two major types of quantitative analysis techniques were chosen to analyse the data for this study: descriptive and inferential statistical analysis.

3.9.2.1 Descriptive Statistics

Descriptive statistics may be used to classify, review and explain the profile of all respondents (Cohen and Holliday, 1982). In previous studies, descriptive statistics were used to present the data of the research project for example, "Exporting Australia's Tertiary Education Services" (Bureau of Industrial Economics, 1989) and "Export of Education Services" (Industry Commission, 1991). Thus, descriptive statistics using the frequencies analysis was considered to test hypothesis 4, *"When international students make a decision to enrol at HEIs in Thailand/Australia, they perceive that study in Thailand/Australia provides them high benefits";* hypothesis 5, *"When international*

students make a decision to enrol at HEIs in Thailand/Australia, they are aware of the risks of studying abroad".

Frequencies analysis was also used to test hypothesis 8, "*International students have a positive perception (their expectations have been met) towards the characteristics of the HEI after they have enrolled in their course in Thailand/Australia*", hypothesis 9 "*International students have a positive perception (their expectations have been met) towards the characteristics of the country (Thailand/Australia) they chose as their destination for study abroad"* and hypothesis 10, "*International students in Thailand/Australia eventually confirm the value of the international higher education service (at the confirmation/disconfirmation stage) offered by HEIs in Thailand/Australia (during their study) by intending to complete their studies"*.

Frequencies and percentages were also used to analyse international student characteristics, for example gender, their home countries, field of their study and the institutions where they were currently enrolled.

3.9.2.2 Inferential Statistics

Inferential statistics may be used to predict population parameters from respondents (sample) measures by using mathematical theories (Cohen and Holliday, 1982). In order to analyse data from a sample, parametric and non-parametric statistics are considered. Parametric methods are the most commonly used techniques for testing hypotheses. They can be used when exact population units are known (Cohen and Holliday, 1982). However, when it is difficult to make assumptions, when the population distribution is not normal, non-parametric methods are used to test hypotheses (Saengkaew, 2001). This may be called a "distribution free" process (Cohen and holliday, 1982) and is used when nominal or ordinal scales are used. For interval scales, they are converted to ordinal scales when non-parametric methods are applied (Saengkaew, 2001; Wechasarn, 2003).

Non-parametric methods were initially considered to test the hypotheses of this study because it was expected that the population distribution would not be normal. Therefore, parametric statistics were not applicable for this study. Non-parametric Spearman Correlation, was used to test hypotheses 1 to 3 and the Wilcoxson match-pairs signed-rank test was initially considered for testing hypotheses 6 to 7.

The Spearman Correlation Analysis

The Pearson Correlation is a parametric statistic used to measure association between two variables when both variables are normally distributed (Saengkaew, 2001). Nevertheless, when data or assumption are violated the non-parametric statistic based on the Spearman Correlation can be substituted (Morgan, Griego and Gloeckner, 2001). The Spearman Correlation analysis is appropriate to explain the degree of association between two variables when the data are at the ordinal scale or above (Cohen and holliday, 1982). The Spearman Correlation was used to test hypothesis 1, "*The more important the source of information, the greater the influence it has on influencing international students when making a decision to study in Thailand/ Australia"*, in order to explore the association between the importance and influence of sources of information which affected international students in making a decision to enrol at HEIs in Thailand/Australia at the *persuasion* and the *decision* stages in the model of "the International Students' Innovation Decision Process".

Hypothesis 2, "*The higher the expectation of an higher education institution characteristic, the greater the influence it has on influencing international students when making a decision to study in Thailand/Australia*", was tested to discover the association between the expectation (positive perception) about the HEI characteristic and influence of the HEI characteristics for international students in making a decision to enrol at HEIs in Thailand/Australia at the *persuasion* and *decision* stages of "the International Students' Innovation Decision Process" model.

Hypothesis 3, "*The higher the expectation of a country characteristic, the greater the influence it has on influencing international students when making a decision to study in Thailand/Australia"*, was tested to seek out the association between the expectation (positive perception) about a country characteristic and influence of country characteristics for international students in making a decision to enrol at HEIs in Thailand/Australia at the *persuasion* and *decision* stages of "the International Students' Innovation Decision Process" model.

Wilcoxson Match-Pairs Signed-Rank Test

Wilcoxson match-pairs signed-rank test is suitable to examine "the significance of difference between two samples consisting of matched pairs of subjects" (Cohen and Holliday, 1982, p.193). This technique was used to examine hypothesis 6,"*When international students are studying at HEIs in Thailand/Australia, they perceive that the benefits of study in Thailand/Australia are acceptable when compared to their perception of the benefits before they started studying"* and hypothesis 7, "*When international students are studying at HEIs in Thailand/Australia, they perceive that risks of study in Thailand/Australia are manageable when compared to their perception of the risks before they started studying"*. These were tested to explore the significance of difference in the perceptions of risks and benefits by international students when they make a decision to enrol at HEIs in Thailand/Australia (at the *persuasion* and *decision* stage) and at the implementation stage (when they were studying).

3.10 Limitations in Using Inferential Statistics

The difficulty of obtaining data for quantitative research affected the sample size of this study. Hair et al (1995) suggested that a sample size above 300 is statistically significant to test the hypotheses. The low response rate to the quantitative research in this study posed a problem of the testing hypotheses (the response issues and the response rate of quantitative research in this study are discussed in chapter 5). The researcher consulted with a professional statistician in order to resolve this problem. The statistician

suggested that due to the small sample size, inferential statistics might not be appropriate to test the hypotheses because the results would be meaningless. Therefore, descriptive statistics using frequencies and percentages were suggested as a substitute to test hypotheses 1 to 3 and 6 to 7, and the research results of this study should be identified as exploratory research. This is considered as a limitation of this study and the sample size for further research is discussed in chapter 7.

3.11 Ethical Considerations

Before conducting the main survey, the research proposal, interview questions and questionnaire for the mail survey were submitted to the Human Research Ethics Committee of Victoria University. Approval of the project had to be granted by the Human Research Ethics Committee of Victoria University to ensure the safety, liberty and rights of participants before conducting the interviews and mail survey. That approval was granted on 18 December 2001.

A cover sheet for the survey questionnaire was provided and attached to the questionnaire to explain the objectives of the study. Participants had to be informed that under the research ethics rules, their participation was entirely voluntary and that there were no risks, such as legal, psychological, moral or other risks. In addition, if they felt that the study was intrusive or they were reluctant to answer questions, they could withdraw at any stage of the process.

The in-depth interviews also had to be conducted with the interviewees consent. Before conducting the interviews, the aims of the project and the ethical rules had to be explained to participants. Each participant was also requested to sign the consent form (see Appendix 12) before starting the interview.

Complete questionnaires for the survey with international students in Thailand and in Australia, transcripts and tape recordings of the in-depth interviews had to be stored at the School of Hospitality, Tourism, and Marketing at Victoria University after analysis

by the researcher. All data are now held at the School of Hospitality, Tourism, and Marketing at Victoria University. Only the researcher and supervisors can access the data. In addition, the research results had to be presented in a form by which participants cannot be identified.

3.12 Timeline for Data Collection

The period of data collection in Australia and in Thailand is shown in Table 3.11.

Table 3.11 The Timeline of Data Collection in Australia and in Thailand

Research Activities	Dates
Question design for qualitative research	August-September 2001
Questionnaire construction for quantitative research	August-October 2001
Approval for the project was granted by the Ethics Committee	December 2001
Pre-testing of the survey questionnaire in Thailand/Australia	December 2001
Data collection (qualitative research in Thailand)	December 2001 – February 2002
Data collection (quantitative research in Thailand)	January – February 2002
Data collection (qualitative research in Australia)	February – May 2002
Data collection (quantitative research in Australia)	April – June 2002

3.13 Summary

This chapter provided an account and justification of the research methodology, including the ethical considerations of data collection, for this study. Qualitative and quantitative research approaches were both discussed as options for this study.

The exploratory research using secondary data analysis and an experiences survey was described. The suggestions from the experiences survey were used to clarify the research problems and helped in the development of the research instruments for this study. Research instruments for both qualitative and quantitative research were described and objectives of each question were explained. For qualitative research, the in-depth interview technique was chosen to collect data from respondents by using structured interviews (open-ended questions). The self-administered questionnaire was used for

quantitative research. Two versions of the test were produced in order to survey international students in Australia and in Thailand.

The validity and reliability of the research instruments for qualitative and quantitative research were also discussed in this chapter. Content validity was used to check the validity for both qualitative and quantitative research instruments. The parallel form technique was used to increase the reliability of the qualitative research and the test of internal consistency (inter-item consistency reliability) was used to check the reliability of the research instrument for quantitative research of this study.

The purposive sampling technique was used to select participants for the qualitative research both in Australia and in Thailand. The in-depth interview was used as the data collection method for the qualitative research in this study.

Initially, a multi-sampling method utilising purposive and random sampling techniques was considered for selecting participants, and the mail survey technique was chosen as a method to collect data for the quantitative research in both countries. However, the difficulty in obtaining permission to obtain contact details of international students from HEIs was the main obstacle. Therefore, alternative methods for the selection of participants and for the data collection methods were considered in both countries. In Australia, the snowball sampling technique was used to select participants and the personal administering technique was used to collect data from participants. In Thailand, the purposive sampling technique was chosen to select participants, while drop-off and mail survey techniques were used for data collection.

For analysis of the data obtained in the qualitative research, case analysis of each interview was chosen as the starting point followed by cross-case analyses (comparison of interviews) in order to analyse and interpret the results of the in-depth interviews. Descriptive and inferential statistics were initially considered for analyse of the data obtained from the quantitative research. However, the low response rate in this study prevented the use of inferential statistics to analyse the data. Therefore, descriptive statistics using frequencies and percentage analysis were substituted to describe the

results of the quantitative research. The results of the qualitative research will be reported in the next chapter.

Chapter 3
Research Methodology

3.1 Introduction

This chapter describes the research design and the research methodology. The exploratory research for this study, the construction of research instruments, and the measurement of validity and reliability of research instruments are explained. In addition, the selection of participants, data collection methods and the difficulty of data collection methods are stated. Data editing and the statistical techniques for data analysis are provided. Finally, ethical considerations that maintain participants' rights and safety in the collection of data are discussed.

3.2 Research Design for this Study

This study uses both qualitative and quantitative techniques. The research design of this study consisted of six stages; exploratory research, research instrument construction, testing the research instruments, selection of participants and data collection methods, data editing and data analysis which are discussed as follows:

Stage 1 The Exploratory Research: in this stage, qualitative methods were used to gather data from both primary and secondary sources.

Stage 2 Research Instrument Construction: research instruments used for the qualitative and quantitative research methods in this study were constructed utilizing the information collected in the first stage. The self-administered questionnaire was developed to test a model of "the International Students' Innovation Decision Process" with international students in Thailand and in Australia. In-depth interview questions were developed for interviews with persons whose work is relevant to international students and the international higher education service in Thailand/Australia.

Stage 3 Validity and Reliability of Research Instruments: this stage involved testing the validity and reliability of the research instruments developed in the second stage.

Stage 4 Selection of Participants and Data Collection Methods: this stage involved selection of participants, and sampling techniques used for the qualitative and quantitative phase of this study. This stage also involved selection of the data collection methods used to gather data from persons who were involved with international students and the international higher education service and also from international students in Thailand and in Australia.

Stage 5 Data Editing: after data collection of the quantitative research, questionnaires were checked and edited to ensure completeness before data entry and analysis.

Stage 6 Data Analysis: the seventh stage involved data analysis using selected statistical techniques.

The details of each stage of the research design for this study are discussed in section 3.4 and a summary of research methodology used for this study is presented in Figure 3.1.

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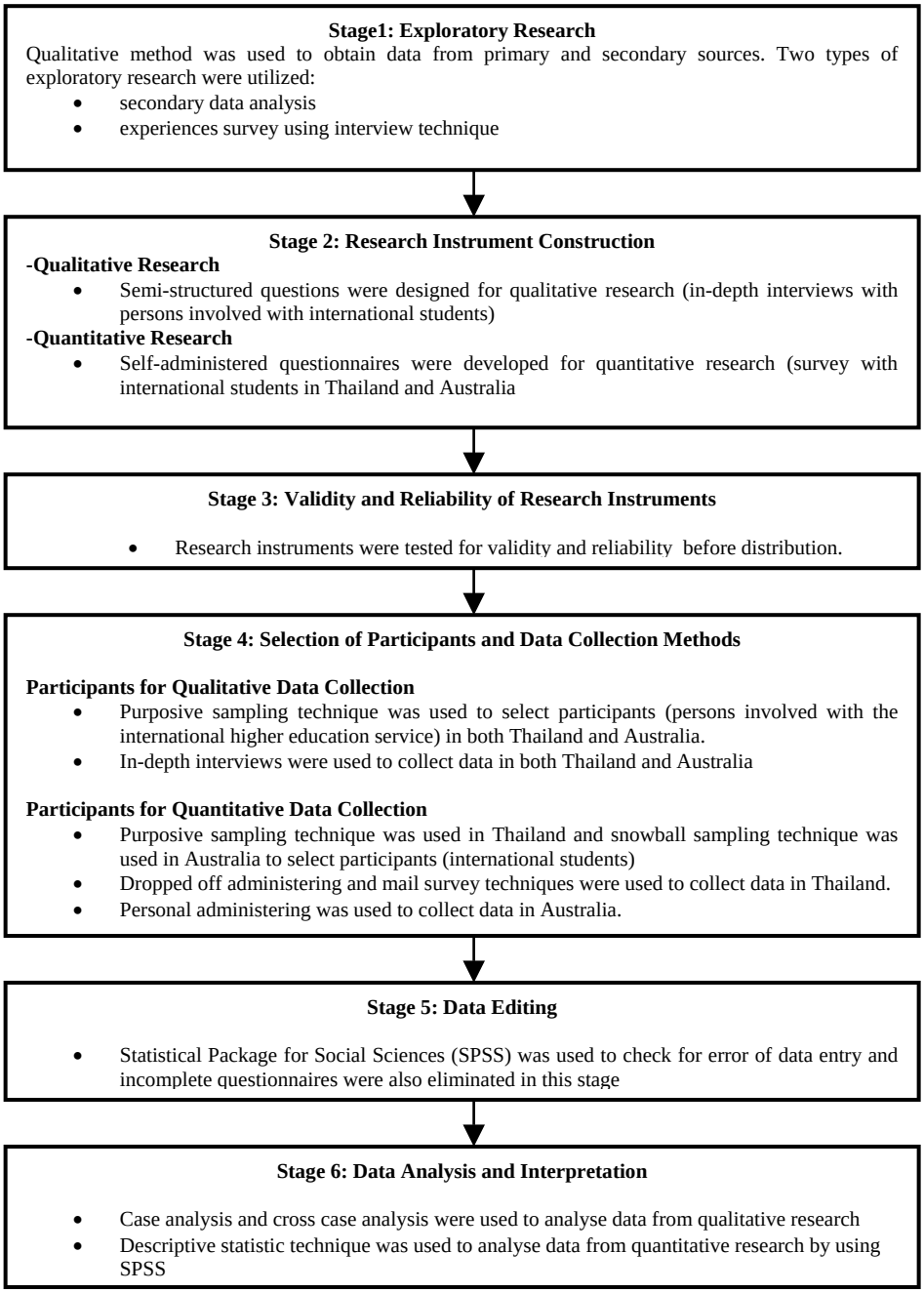
Figure 3.1 The Summary of Research Methodology for this Study



3.3 Choice of Research methods

There are two main research approaches commonly used in business research areas: qualitative and quantitative methods. Qualitative research has been criticized for a lack of reliability and validity and for the production of soft data compared to quantitative methods (Gordon and Langmaid 1993). Qualitative and quantitative methods both have their strengths and weaknesses. They can both be developed and designed to complement each other in order to achieve the best results within the same project. The strengths of one can compensate for the weaknesses of the other. Table 3.1 summarises the respective strengths of qualitative and quantitative research.

Table 3.1: The Strengths of Qualitative and Quantitative Research

Qualitative	Quantitative
• Open-ended, dynamic, flexible. • Provides depth of understanding. • Taps consumer creativity. • Provides a database that is broader and deeper. • Penetrates rationalized or superficial responses. • Provides a richer source of ideas for marketing and creative teams	• Requires statistical and numerical measurement. • Sub-group sampling or comparisons. • Involves survey which can be repeated in the future and results compared. • Taps individual responses. • Less dependent on research executive skills or orientation.

Source: Gordon, W. and Langmaid, R. 1993, p.3.

Qualitative Research for this Study

Qualitative research is sometimes called “naturalistic inquiry” (Lincoln and Guba, 1985). The general conditions of inquiry are natural and have to be accepted as they are discovered. The main objective of qualitative research is finding ideas that lead to the new knowledge (Sherman and Webb, 1988). Gordon and Langmaid (1993) stated that qualitative research is used to expand knowledge, clarify the real issue, increase understanding of the research topic and create hypotheses. Qualitative data can be collected from either non human sources or human sources (Lincoln and Guba, 1985) both of which were used in this study.

Gordon and Langmaid (1993) classified basic qualitative methods into two approaches: the group discussion and the in-depth interview. They have compared the advantages and disadvantages of both methods as summarised in Table 3.2 and 3.3.

Table 3.2 The Advantages of the Group Discussion and the In-Depth Interview

The group discussion	The in-depth interview
• The spontaneous response is supported in a group. • The cultural and social influences on behavior and attitudes of members in a group are emphasized. • Members of a research team can observe groups to find out attitudes and reaction of members in groups. • Experiences of one person can inspire others. • The group environment puts participants under less pressure than the in-depth interview	• Information can be gathered in depth of detail on one interviewee at a time. • Individual ideas are not under pressure from others so both majority and minority points of view can be obtained. • There is no pressure from other members in a group. • Interviewees can be selected who are likely to have answers to the questions. • There is no difficulty for recruitment.

Source: Gordon, W. and Langmaid, R. 1993, pp.10-16.

Table 3.3 The Disadvantages of the Group Discussion and the In-Depth Interview

The group discussion	The in-depth interview
• A strong personality of some participants in a group may intimidate other members. • Members in a group may have negative reaction to the moderator. • Minority opinions may be lost while conducting the discussion.	• It is costly. • Takes time for the collection, interpretation and analysis of data. • There are geographical limits

Source: Gordon, W. and Langmaid, R. 1993, pp.10-16

Advantages and disadvantages of the group discussion and the in-depth interview were compared and the in-depth interview was chosen for the collection of data for this study because this study needed individual ideas from interviewees both majority and minority points of view and it also provided a chance to get more feedback about international education service from interviewees in Thailand and in Australia.

Qualitative Research for this Study

Qualitative research method was used in two stages for this study. It was first utilized to obtain data from primary source (experiences survey using the in-depth interview

technique) (see page 95). and secondary sources (secondary data analysis). Data from the exploratory research were gathered and analysed in order to construct research instruments for the survey of this study. Qualitative research method using the in-depth interview technique was also utilised in collecting data for the main survey in the fourth stage of this study.

The in-depth interview was chosen for this study because it provides a chance to get more feedback from respondents and usually receives a high response rate, even though it is costly, time consuming, and has geographical limits (Zikmund, 1997; Sekaran, 2000). The in-depth interview can be conducted face to face, door to door or over the telephone (Zikmund, 1997). It can be structured or unstructured (Sekaran, 2000). In structured interviews, respondents were asked the same questions in the same order delivered in the same standard (Punch, 1998) which may be called the *"standardized interview"* (Berg, 2001, p.69). Several studies about international education service such as those undertaken by Smart and Ang (1992, 1993, 1995) have used the in-depth interview for data gathering, nevertheless, they did not explain types of interviews in their studies.

Persons who were involved with the international higher education service of government departments (only in Thailand) and HEIs in Thailand and Australia that offered international higher education service were selected as respondents because it was expected that they could provide in-depth information about the international higher education service. In-depth interviews with persons involved with the international higher education service were conducted in each institution/government department to seek out critical successful strategies in approaching international students. Furthermore, the interview was planned to focus on trends in international education in each country from the international affairs officers' points of view. The interview results were expected to be useful in helping HEIs and the countries they operate in, particularly for Thailand, in planning strategies to attract more international students.

Quantitative Research for this Study

Quantitative research actually provides numerical measurements and enables comparison of items within a survey or between surveys that have been carried out at different times. By using research instruments, these measurements can be made and tested by different types of statistical techniques for validity and reliability (Gordon and Langmaid, 1993).

In order to investigate factors affecting international students in making a decision to study in Thailand and in Australia and to examine their intention to complete their studies, quantitative research was considered for this study. A questionnaire was used as the research instrument in this part of the study to test the proposed model of "the International Students' Innovation Decision Process" in Thailand and in Australia.

3.4 The Research Methodology for this Study

This study consists of six stages. The details of each stage of the research methodology for this study are discussed in this section:

3.4.1 Stage 1- The Exploratory Research

Exploratory research is normally used as the first stage of a research process. It is conducted to identify and clarify problems (Zikmund, 1997). Zikmund (2003) also claimed that exploratory research can help researchers reach a better understanding of the extent of the research problem. Similarly, Sekaran (2000) stated that the exploratory study is conducted to clarify the nature of the research problems. The main objective of the exploratory research is to narrow the scope of the study and to discover the research problems in order to specify research objectives (Churchill and Iacobucci, 2002). Zikmund (1997) stated that exploratory research is important and that most researchers used qualitative methods. It can help to clarify the concept of the research and researchers can gain in-depth details and ideas for their study (Churchill and Iacobucci 2002). Nevertheless, Zikmund (1997) claimed that there are some limitations, for

example it cannot provide quantitative measurements, the interpretation is based on a researcher's judgment and the sample is not representative of the population. Hence, the exploratory research was used as an initial stage for this study.

In this study, the exploratory research was used to gather and analyse data from primary and secondary sources in order to construct research instruments for the survey of this study.

Zikmund (1997) classified techniques for gaining clearer ideas of research problems into four basic categories: experience surveys, secondary data analysis, case study method and pilot study.

Secondary Data Analysis: is the method used to assemble data from various sources of documented information. Literature surveys of published articles, theories from text books and previous empirical studies which relate to the research projects were analysed to scope the framework of this study.

This technique is economical and can be used to gather data faster than other techniques (Churchill and Iacobucci, 2002). Disadvantages of secondary data analysis are that the data may be out-of-date and may not meet the needs of researchers because they may have been conducted with different objectives. However, secondary data have been accepted as of great value for exploratory studies. Secondary data analysis was chosen to use in this study because there are reliable previous studies investigated in international education service particularly in Australia. Further, theories from text books involving the decision making process and the innovation decision process was investigated as important secondary data in order to set the framework of this study.

Experience Survey: which is sometimes called "key informant survey" (Churchill, 1996). It is a technique in which interviews of a small number of people who are knowledgeable and experienced in the area of the research problems are undertaken. The aim of this technique is to identify and clarify problems of the project. Due to lack of

previous empirical studies in Thailand, the experience survey was chosen to use only in Thailand in order to gather more information about international education service from international education's experts. The experience survey's results from these experts were very helpful to scope and construct research instruments for the main survey of this study.

Pilot Study: this technique is used to gather primary data from a small number of respondents representative of the sample for the major survey. These representative respondents give ideas about the project and the results of the pilot study are used to recommend possible ideas for the main survey. The main techniques used for a pilot study include the focus group interview, projective techniques and the in-depth interview. A pilot study is a good method to seek out ideas and suggestions from respondents representative of the sample but it is costly and takes time for collecting and analyzing data (Zikmund, 1997) which was not appropriate for this study.

Case study: is a technique used to collect data from a few situations which are similar to the researcher's project. It is the intensive study of a sample that is selected according to the phenomenon of interest (Churchill, 1996). The results from a case study may not be reliable because each situation is different. Furthermore, it is very difficult to collect data with this method because researchers may have limited access to data from firms (Churchill and Iacobucci, 2002). Hence, this method was not used in this study because there was limited access to data from HEIs in both Thailand and Australia.

The details of secondary data analysis and experience survey used in this study are discussed in the following sections.

3.4.1.1 Secondary Data Analysis

The development of international education services in Thailand and in Australia was investigated. Factors affecting international students when making a decision to study abroad were assembled from different secondary sources of information such as text

books and international journals. The model of the innovation decision process (Rogers, 1995) was studied and adapted for the proposed model of “the International students’ Innovation Decision Process”.

3.4.1.2 The Experience Survey

In Australia, sufficient secondary data about the international higher education service were available to scope the framework of the study. However, this was not the case for Thailand. Therefore, the experience survey for this study was only conducted in Thailand due to the lack of previous research in this area. An experience survey was conducted in January 2001 with two persons, who had been involved with international students/international higher education service, one was the director of international affairs from a government run HEI and the other was the director of the international programme from a private HEI in Thailand. The objective of this experience survey was to investigate the directions of the international education service and to seek out factors which can attract international students to study in Thailand.

Suggestions from the Experience Survey

The experience survey of two professionals in Thailand suggested that international higher education service in Thailand has grown significantly since the Asian crisis in 1997. Both of the respondents concurred that some local students who wanted to go abroad for their studies changed their mind and elected to enrol at HEIs in Thailand which offered international programmes (delivered in English) due to financial problems. This affected the demand from local students who wished to study international programmes in Thailand. Therefore, HEIs in Thailand have attempted to offer international progrmmes in order to supply this demand. Both of the respondents also agreed that the major target students for their HEIs were still local (Thai) students, however their HEIs have started looking for students from other countries.

The professional from the state HEI stated that a problem in introducing this service to prospective students was that the Thai government did not have a visible policy to support the expansion of this service. In addition, there was a management problem within one of the organisations (HEI) in offering the international higher education service. The other professional, from a private HEI claimed that lack of research investigating the international higher education service area affected HEIs and the country in providing appropriate strategies to attract international students.

Both of the respondents also suggested that this project should investigate problems in offering an international higher education service because this service is very new for HEIs in Thailand. One of these professionals suggested that the in-depth interview should be conducted with government representatives in order to discover the government policy that supports the international higher education service. The respondents also commented about HEI characteristics affecting international students' decisions in choosing Thailand as a destination country. These include the standard and quality of programmes offered by HEIs in Thailand, the length of programmes, system of exemptions (or credit transfer), HEIs' facilities, an effective international department, helpful staff, scholarships and a counselling centre for international students. Characteristics of the country, for example culture, Thai food, political situation, low cost of living, good basic infrastructure such as public transportation, were also suggested as factors which might be of major consideration by international students in coming to study in Thailand. In addition, both respondents recommended that Thailand and its HEIs should provide information through effective communication channels in order to communicate with prospective international students. The Internet, Thai government representatives in overseas countries such as Thai embassies, education exhibitions and international students' sponsors should be appropriate sources for sending information to prospective international students.

Finally, one respondent stated that the number of international students from a wide range of countries who want to study in Thailand had increased rapidly in the last few years. This came about from those international students who believed that they could

gain some benefits from study in Thailand, for example increasing their international understanding, get overseas experience that was different from their home countries and earn more money after finishing the degree. This respondent also commented that due to Thailand not being an English speaking country, international students may, therefore, face a communication problem when they first arrived in Thailand.

Secondary data analysis and the experience surveys in the first stage helped to clarify research problems, helped to specify the scope of this study and generate ideas for creating the research instruments for testing the model and for the main survey of this study.

3.4.2 Stage 2 - Research Instruments Construction

Research instruments for this study were developed for the in-depth interviews (qualitative research) and for the survey with international students (quantitative research) in Thailand/Australia.

3.4.2.1 Research Instruments Used for the Qualitative Method

One of the objectives of this study was to develop appropriate strategies for HEIs in Thailand, which offer, and intend to expand, the international higher education service by using the results from in-depth interviews in both Thailand and in Australia. The results of the interviews in Australia were expected to be useful for Thailand in providing a service for prospective international students by learning from Australia's experiences.

The in-depth interview, using the structured interview technique (open-ended questions) was chosen for collecting qualitative data for this part of the study.

The interviewees were expected to contribute to the identification of trends in international education and marketing strategies for the business of international

education. Questions for the in-depth interview were developed from information assembled from the exploratory research. Two versions of the interview questions were constructed based on Australia's experience, one version for use in Australia and the other for use in Thailand (see Appendices 2 and 3) The objectives of the interview were to:

- Obtain general information about the international higher education service, the growth rate, and the forecasted demand for this service in both countries;
- Identify benefits and risks to the host countries, when offering international higher education to international students;
- Identify characteristics of international students of HEIs in Australia and Thailand;
- Investigate opportunities and the potential for Australia and Thailand to expand the international higher education service to target countries;
- Identify important factors which attracted international students to study in the host country from an academic point of view;
- Obtain information about appropriate marketing strategies in offering international programmes to international students;
- Identify policies from both countries which promote the international higher education services.

3.4.2.2 Research Instruments Used for the Quantitative Method

The research instrument used in this study was a self-administered questionnaire. The questionnaire was constructed to test the proposed model of "the International Students' Innovation Decision Process". Each service industry has its own unique features (Kivela, Reece and Inbakaran, 1999) and this also applies to the international higher education service. Therefore, the research instrument of this study was designed specifically for use with international students in Thailand and in Australia about their perceptions of studying abroad. The survey questionnaire was intended to discover:

- The importance of sources of information for international students to seek out information on study abroad;
- The expectations for HEIs and country characteristics;
- The influential sources of information, influential HEI characteristics and influential country characteristics, for international students in making a decision to enrol at HEIs in Thailand and in Australia;
- The benefits and risks that international students are concerned with when making a decision to enrol at HEIs in Thailand and in Australia;
- International students' experiences of HEIs and country characteristics in the destination country as well as their experiences in terms of benefits and risks of study abroad when they were studying in Thailand and in Australia;
- International students' intention to complete their studies in Thailand and in Australia.

To date, as far as the author is aware, there is no research instrument that had been developed for testing the "International Students' Innovation Decision Process. Thus, the format of the questionnaire developed for this study was adapted from the research instrument used in the hospitality area developed by Kivela, Reece, and Inbakaran (1999). Their research investigated consumer attitudes about the restaurant environment. Their research instrument was constructed using a 5-point scale to measure customer attitudes toward the restaurant environment before and after they received the service. Numerical 5-point scales are similar to semantic differential scales but use numbers as response options, rather than a semantic range (Zikmund, 1997). The numerical 5-point scale uses bipolar adjectives in the same way as the semantic differential scale but "the numerical labels for intermediate points on the scales is an effective a measure as the 'true' semantic differential" (Zikmund, 1997, p.361). The construction of a semantic differential scale begins with determination of a concept to be rated and a researcher chooses dichotomous pairs of phrases or words that can be used to describe the concept (McDaniel and Gates, 2002). The scale used for the first three sections of this questionnaire is called "a 5-point scale" and respondents were required to indicate the strength of their response by marking a number from 1 to 5. The five-point scale used in

this study is defined as an ordinal scale for measurement because the degree of distance between the objects of the attitude test cannot be measured (Saengkaew, 2001; Boonnak, 2001; Chaichan, 2003)

In order to test the proposed model of "the International Students' Innovation Decision Process", the questionnaire for this study consisted of four main sections. In the first three sections, a 5-points scale was used to identify response positions while in the final section a nominal scale was used to identify the background of respondents.

The first section of the questionnaire investigated the importance and influence of sources of information used by international students when making a decision to study abroad. The 5-point scale was set out from 1 = not important to 5 = very important and 1 = not influential to 5 = very influential.

In the second section, the international students' assessment of the benefits and risks of studying abroad when they were making a decision to study in Thailand/Australia and when they were studying in those countries were investigated. The 5-point scale of this section was indicated from 1 = no benefit to 5 = very high benefit and from 1 = no risk to 5 = very high risk

The third section was used to assess international students' expectations and the influence of HEI and country characteristics when making a decision to study in Thailand and in Australia. The 5-point scale of this section was set out from 1 = low expectation to 5 = high expectation. In addition, international students were requested to evaluate their experiences of HEIs and country characteristics when they were studying at HEIs in those countries. The 5-points scale used to examine international students' experiences about HEI and country characteristics was set out from 1 = has not met my expectation to 5 = has met my expectation.

The final section was designed to determine international students' intention for continuing to complete their study in Thailand and in Australia. In addition, their

background including gender, their home country, the degree/programme, discipline areas and HEI in which they were enrolled were identified in this section. Furthermore, their first choice of country for study abroad and the final reasons which led them to make a decision to enrol at an HEI in Thailand/Australia were specified. A nominal scale was used in this section in order to identify and classify the difference between international students in both countries.

The questionnaires for this study were constructed in the English language for use in Thailand and in Australia. The questionnaires were developed by utilizing factors from previous studies and suggestions from the experience survey (in Thailand) and then constructed into two versions, one for use in Australia and the other one for use in Thailand (See Appendices 4 and 5**).**

3.5 Stage 3–Validity and Reliability of Research Instruments

In order to ensure the appropriateness of measures used in this study, the pre-test of research instruments was used to examine validity and reliability of questions before conducting the main survey. In this study, validity and reliability tests were used to test both qualitative and quantitative research instruments.

3.5.1 The Test of Validity

After building the model, constructing research instruments and selecting the participants, it is necessary to assure that participants understand all of the questions in the research instrument. This is usually called the “validity” of the instrument (Nunnally, 1978). However, Sekaran (2000) classified types of validity into three groups: content validity (face validity), criterion-related validity and construct validity.

Content Validity (Face Validity): an instrument is considered to have content validity if it provides clear and understandable questions and covers the concept of the study

(Zikmund, 1997). Content validity of an instrument can be approved by professionals involved in the area covered by the project.

Criterion-Related Validity: this can be classified as concurrent validity or as predictive validity. Concurrent validity applies when a new measurement is investigated at the same time as standard measures. Predictive validity applies when a new measure predicts a future situation or relates to measurements taken at a later time. Zikmund (1997) stated that criterion validity provides a stronger empirical test than content validity. However, the objective of each study is different hence, criterion-related validity cannot validate every test and each test has its criterion of performance (Nunnally, 1978).

Construct Validity: can be applied in order to assure that the measurement is appropriate for testing the hypotheses and originating from the underlying theories on which the study is based (Zikmund, 1997).

3.5.1.1 Selection of Tests of Validity of the Qualitative and Quantitative Components of this Study

It has been mentioned earlier that to the best of the author's knowledge, there has been no research instrument that has been developed to test the model of "the International Students' Innovation Decision Process". Therefore, content validity (face validity) was decided upon as the most appropriate method for pre-testing of both the qualitative and quantitative research instruments of this study even though it provides less precise information than criterion-related validity. Content validity (face validity) of this study was checked by discussing the interview questions (qualitative method) and the content of the questionnaire (quantitative method) with two persons in Thailand, who were involved with the international higher education service in order to confirm that these instruments were suitable for this study. Ahmadi, Helms and Raiszadeh (2001) used content validity in their study of "Business Students' Perceptions of Faculty

Evaluations". They involved four academic professionals in checking content validity of the research instrument in order to assure appropriateness and clarity.

3.5.2 The Test of Reliability

The reliability tests give information about consistency and stability through a series of research measures (Cronbach, 1965). Reliability can be tested in both quantitative and qualitative research (Cohen, Manion and Morrison, 2000).

3.5.2.1 Reliability in Qualitative Research

Reliability tests for quantitative research may not work for qualitative research (LeCompte, Millroy and Preissle, 1992). Quantitative research presumes the probability of replication; if the same techniques are tested with the same group the test results should be the same but it is different for qualitative research. Reliability testing in qualitative research can be approached in three different ways: stability of observations, inter-rater reliability and parallel form (Denzin and Lincoln, 1994).

Stability of Observations: if researchers make observations in a different place or at a different time they should be the same.

Inter-Rater Reliability: if researchers use the same theoretical framework and make observations under the same circumstances the results should be the same.

Parallel form: if researchers investigate more than one group during their observations they should make the same observations and interpretations of what they do. In order to control the reliability of qualitative research for in-depth interviews, it is necessary to have an appropriate structured interview with the same questions, the same layout and the same order of wording (Silverman, 1993).

Silverman (1993) also suggested that the reliability of the interview can be increased by emphasis on inter-rater reliability with a highly structured interview using the same format, same questions and sequence of wording for each respondent.

In this study, parallel form was used to increase the reliability of the interview. In-depth interview questions were developed in two versions, one used in Australia and the other one used in Thailand (See Appendices 2 and 3). In-depth interviews were conducted with persons involved with international higher education service, using the same format, same questions and order of wording for each respondent in Thailand. This was also done in Australia by using the same technique. Using this technique can ensure that all interviews are conducted in the same direction, answer research questions and achieve the research objectives.

3.5.2.2 Reliability in Quantitative Research

The reliability of measure refers to the extent that the measurement process is free from error (Garrett, 1966; Kinnear and Taylor, 1996). Reliability can be classified into two dimensions: stability and consistency (Sekaran, 2000).

The Test of Stability: the stability of a measure is the ability to maintain stability of a research instrument over a period of time in order to assure its stability when used in a different situation. Two types of the test of stability are considered, test-retest and parallel-form reliability (Sekaran, 2000). The test-retest reliability technique involves a test of the same measure for the same participants at two different times in order to test for the stability of the research instrument (Sekaran, 2000). If the measure is stable over time, results of both tests should be similar. A problem of test-retest reliability is that the first measure may be sensitive to participants, which may affect the results of the second test. Moreover, if the period between the two tests is long, participant attitudes may change (Zikmund, 1997). Parallel-form reliability engages with two comparable sets of the measure. Both sets have similar item response layouts but wording and ordering of questions are changed (Sekaran, 2000). If two comparable sets are highly correlated it

can be assumed that the measure is reliable with minimum error from ordering words and other factors.

The Test of Internal Consistency: the second dimension of reliability involves the homogeneity of the measures. For the measurement of attitude it may be necessary to ask various similar questions or a group of scale items. In order to confirm the internal consistency of multiple items, scores on subgroups of items in the research instrument should be highly correlated (Zikmund, 2003). This can be tested through the split-half method and inter-item consistency.

The split-half technique measures the correlation of internal consistency between two halves of the scaled items of an instrument. It is used to measure dependency of variables, which are split in two halves (Sekaran, 2000). The inter-Item Consistency Reliability technique is used to check all items in a measure. Independent items should be measured on the same concept and correlate with one another. The most popular technique for testing internal consistency is Cronbach's Coefficient Alpha. It was formulated by Lee J. Cronbach in 1951 to assess the quality of research instruments (Churchill, 1979). Cronbach's alpha is used to test multi-item scales, the higher the score of the test (close to 1) the higher the reliability of the instrument (Sekaran, 2000).

In this study, inter-item consistency reliability was used to test reliability of the research instrument because the questionnaire utilised multi-item scales and it has been used in previous service quality studies. Cronbach's Coefficient Alpha has been used by Asubonteng, McCleary and Swan (1996) in their study of service quality, as well as Kivela, Reece and Inbakaran (1999) in their study of consumer satisfaction in the restaurant environment. Thus, the test of internal consistency (inter-item consistency reliability) was used in this study to test the reliability of the research instrument (questionnaires used for testing the model for this study).

3.5.2.3 Pre-Test of the Questionnaire for Quantitative Research

"Data collection should never begin without an adequate pretest of the questionnaire" (Churchill, 1996, p.371). The pre-test is the use of questionnaires on a trial basis on a small number of respondents to check question content, wording, sequence, layout and any flaws in the questionnaire so that all corrections that are necessary can be made before the real survey (Malhotra, 1999). The objective of the pre-test of the questionnaire for this study is to assure that questions are clear, understandable and reliable for respondents.

Malhotra (1996) suggested that respondents from the pre-test and real survey should be chosen from the same population. Therefore, the pre-test of this study was conducted on thirty (30) international students who were enrolled at HEIs in Thailand by dropping questionnaires at two HEIs which participated in the exploratory research (See section 3.4.1.2, p. 95). Questionnaires were also distributed to fifty (50) international students who enrolled at HEIs in Melbourne by using convenience sampling technique.

Results of the Pre-Test

Cronbach's Coefficient Alpha test was used to test the internal consistency of the questionnaire in order to check the reliability of questions. In the first three sections of the questionnaire, questions were constructed using multi-item scales which can be tested by Cronbach's Coefficient Alpha. Data from the fifty completed questionnaires collected from international students in Australia and thirty-three completed questionnaires from international students in Thailand were used for the inter-item consistency reliability test. Variables in the questionnaire were named and coded by a process called "defining the variables" (Pallant, 2001) before data entry. The Statistical Package for the Social Sciences, Windows version 10.0 (SPSS 10.0) was used for data analysis to test the reliability of the questionnaire. The results of the inter-item consistency test for both countries are shown in Tables 3.4. and 3.5.

Table 3.4 Results of Cronbach's Coefficient Alpha Reliability Test (Australia)

Section	Number of items	Cronbach's Coefficient Alpha
Section 1		
A. Source of Information (Important)	11	.76
B. Source of Information (Influential)	11	.86
Section 2		
A. Benefits before	5	.72
B. Benefits now	5	.76
C. Risk before	5	.77
D. Risk now	5	.81
Section 3		
A. HEI characteristics (expectation)	14	.90
B. HEI characteristics (influence)	14	.80
C. Country characteristics (expectation)	10	.77
D. Country characteristics (influence)	10	.84
E. Higher Education characteristics (met expectation)	14	.92
F. Country characteristics (met expectation)	10	.86

N = 50

Table 3.5 Results of Cronbach's Coefficient Alpha Reliability Test (Thailand)

Section	Number of items	Cronbach's Coefficient Alpha
Section 1		
A. Source of Information [Important]	10	.91
B. Source of Information [Influential]	10	.87
Section 2		
A. Benefits before	4	.68
B. Benefits now	4	.76
C. Risk before	6	.69
D. Risk now	6	.75
Section 3		
A. HEI (expectation)	14	.81
B. HEI (influence)	14	.69
C. Country characteristics (expectation)	10	.62
D. Country characteristics (influence)	10	.77
E. Higher Education characteristics (met expectation)	14	.90
F. Country characteristics (met expectation)	10	.65

N = 33

Cronbach's Coefficient Alpha scores can indicate the correlation of items of the research instrument (Nunnally, 1978). If Cronbach's Coefficient Alpha is low, the instrument should be reconsidered. The score of alpha depends on various factors such as the number of items, the sample size (Nunnally, 1978) and the purpose of the research (Churchill, 1979). Kaplan and Saccuzzo (2001) suggested that, generally, if Cronbach's Coefficient Alpha value exceeds .60 the reliability of the questionnaire is confirmed. The test of reliability for this study was tested in a form of total variable score that can be used to examine the reliability of the questionnaire (Pallant, 2001). For the results of

this test, Cronbach's Coefficient Alpha range for the sample is from .72 to .92 (in Australia) and from .62 to .91 (in Thailand), so it can be confirmed that the research instrument of this study is satisfactory for use in the main survey.

Although the test of reliability of the questionnaire is satisfactory, several questions were revised following respondents' comments in order to make questions clearer. Therefore, two questions needed modification in order to make them clear before conducting the main survey. Firstly, in section 1, one more choice was added to each part (A and B), sources of information, which were important to persuade and were influential to lead international students in making a decision to study abroad. In these parts (A and B) if international students did not use any sources of information, they were asked to tick "did not use" and so there would be no need to rate the sources. The reason for modification is that some international students had never used some of the sources of information, therefore they could not answer these questions. Secondly, for question 1 in section 4, "Will you continue your course until you complete your degree?" was changed to "Will you continue your course until you complete your degree/programme?" The reason for this alteration is that exchange students may not graduate with a "degree" from institutions abroad they may only complete the "programme" under the agreement of the destination country. Revised questionnaires used in Australia and in Thailand are provided in Appendices 6 and 7.

3.6 Stage 4- Selection of Participants and Data Collection Methods

In order to collect data for this study, participants were selected utilising a sampling technique. The terminology of "sampling" involves the process of choosing a small percentage of the whole population as its representatives (Zikmund, 1997). The population for this study is separated into two main groups;

- Persons involved with the international higher education service in Thailand and in Australia (Melbourne) for the in-depth interviews.
- International students in Thailand and in Australia (Melbourne) for the questionnaire survey.

Sampling techniques, data collection method and sample size issues are discussed in section 3.6.1, 3.6.2 and 3.6.3. Selection of participants, data collection methods and sample size for this study are discussed in section 3.8

3.6.1 Sampling Techniques

The two main types of sampling techniques are: probability and non-probability techniques. For probability sampling all units in the population have the same chance of being chosen as part of the sample. For non-probability sampling the units do not have an equal chance of being chosen as part of the sample (Sekaran, 2000). The characteristics of these two techniques including advantages and disadvantages are summarised in Tables 3.6 and 3.7.

Table 3.6 Probability Sampling Techniques

Probability Sampling Techniques		
Description	**Advantages**	**Disadvantages**
1. Sample Random Sampling Each unit in the population has an equal chance of being selected in the sample	-Easy to analyse data	-Not as efficient as stratified sampling. -High cost.
2. Systematic Sampling A beginning point is chosen by a random process and then every *n*th unit in the population is selected.	-Easy to use if the population frame is available.	-If the sampling interval involves a periodic ordering of the population, it is possible that bias will be increased.
3. Stratified Sampling The population is divided into subgroups and thereafter subjects are selected for the sample from within the different subgroups.	-Sampling error can be reduced because characteristics of members within the groups are consistent but they are different between groups. -Low cost	- It takes more time than the simple or systematic sampling techniques.
4. Cluster Sampling Members in a group are different and members in each group are selected randomly.	-It is an economically efficient technique. -Low cost	-Bigger error for comparable size than other probability sampling.
5. Multi Stage Sampling This technique involves with combination of two or more steps of the probability techniques and frequently used in national-wide surveys.	- Offers more details about the topic of the project.	-High cost

Source: Sekaran (2000, p.281);
Zikmund (1997, pp.440-441)

Table 3.7 Non-Probability Sampling Techniques

Non-Probability Sampling Techniques		
Description	**Advantages**	**Disadvantages**
1 .Convenience Sampling Used for collecting the data for a large survey.	-It is the easiest way to reach members who are selected for the sample. -It can be done quickly and cost effectively.	-It cannot measure or control variability and bias.
2. Judgment or Purposive Sampling Involves choosing respondents based on characteristics required. Researchers choose a sample to support a specific objective of their studies.	-Sample guaranteed to meet researchers' specific aims.	-Bias may occur from experts beliefs, which may take a sample un-representative.
3. Quota Sampling Sample is chosen from target groups according to a quota.	-Very extensive use. - No need for a list of population	- There is bias in researchers' classification of sample.
4. Snowball Sampling The first respondent is identified from a small number of individuals who have the characteristics in which researchers are interested but thereafter more respondents are chosen from information given by the first sample.	- It is useful for sampling a population, which is difficult to access	- Bias may occur because the sample is not dependent.

Source: Sekaran (2000, p.281)

Zikmund (1997, pp. 440 – 441)

Cohen, Manion and Morrison (2000, pp.102-104)

The sampling techniques for qualitative and quantitative research used in this study are discussed in section 3.6.4.

3.6.2 Data Collection Methods

Data can be collected by a variety of techniques. The methods of data collection include interviews that are either telephone interviews, face-to face interviews or computer-assisted interviews; questionnaires that are electronically administered, personally administered or mailed (Sekaran, 2000). Data can be collected by any one of the aforementioned methods or can be gathered by dropping off questionnaires at a central location (Zikmund, 1997). Table 3.8 provides basic data collection methods for communication with respondents.

Table 3.8 Data Collection Methods for Communication with Respondents.

Data Collection Methods		
Description	**Advantages**	**Disadvantages**
1. Personal Interview It is face to face communication and can be done at respondents' home or their office.	- Gives the opportunity for direct feedback from interviewees. - Can be conducted longer than telephone interview - All questions are completed.	- It is costly and takes time. - It is difficult to make contact with interviewees.
2. Telephone Interview It is an important technique and the quality of collected data can be comparable to personal interview.	- It is quick for collecting data. - Less time consuming. -Lower cost than personal interview.	- There is a problem in obtaining a representative sampling frame because all telephone numbers are not listed in the directories.
3. Mail Survey The questionnaire is sent to a respondent by the mail.	-Low cost when compare to an interview. - Convenient for respondents - Covers a large area. - No interviewer bias - Use for long questionnaire	- Low response rate. - Lack of control over respondents
4.Computer Interactive survey (online survey) It is the method to collect display questionnaire on the computer screen.	- It is the ability of computer in arranging the sequence of questions	-Not everyone can access a computer. - No opportunity for asking open-ended question - Complicated questionnaire cannot be handled through this medium
5. Dropped off Administering The questionnaire is distributed by using the people at a center location, for example international students offices, to deliver questionnaire to respondents.	- Low cost and quick.	-Sometimes, there is no cooperation from people in the centre locations.
6. Personal Administering It is a good alternative to distributing questionnaires to respondents by researchers or members of the research team.	- It can be collected in a short period.	- It is costly if sample are dispersed in different areas.

Source: Sekaran (2000, pp.258-259)
Zikmund (1997, pp.243-258)
Proctor (2000, p.117, p.125)

The data collection methods for qualitative and quantitative research used in this study are discussed in section 3.6.4.

3.6.3 Sample Size

Malhotra (1999) stated that determining the sample size is very complicated and involves several quantitative and qualitative considerations. These considerations include the importance of the decision, the nature of research, the number of variables, the nature of the analysis, sample size used in similar studies, incidence rates, completion rates and resource constraints (Malhotra, 1999). The population, sample size, selection of participants, sampling techniques and data collection methods of this study are discussed in section 3.6.4.

3.6.4 Selection of Participants, Sampling Techniques and Data Collection Methods for this Study

The population, sample size, selection of participants, sampling techniques and data collection methods for this study is provided into two parts. The first part involving qualitative research, covers participants for the in-depth interviews with persons involved with the international higher education service in Thailand and in Australia. The second part involving quantitative research, covers participants for the survey involving international students who were enrolled at HEIs in Thailand and in Australia.

3.6.4.1 Qualitative Research

The sampling frame is a list of sampling units from a sample, which is selected and it can consist of geographical areas or other features (Churchill and Iacobucci, 2002). The sample frame for the qualitative research of this study was HEIs in Thailand and in Australia (Melbourne) that provided international higher education service to international students. The purposive sampling technique was used to choose the sample in Thailand and in Australia based on the characteristics (HEIs in Thailand and in Melbourne that provided international higher education service and delivered in English) requirement of the study. This technique assured that all participants met the researcher's specific aim.

In-depth interview was chosen as a method for data collection in qualitative research of this study. An in-depth interview can be conducted in two main ways: by personal interview or the telephone (Zikmund, 1997). They can be structured or unstructured (Sekaran, 2000). Several studies in the international higher education service area have used the in-depth interview for gathering data, for example Smart and Ang's (1992, 1993) study for market opportunity for Australian HEIs in Singapore and Hong Kong and also their study for enhancing Australia's recruitment of international students in Taiwan (Smart and Ang, 1995). However, they did not indicate the types of questions they used for their interviews.

The in-depth interviews of this study involved collecting data from persons who are involved with the international higher education service (See positions which interviewees were held in Table 3.9, p. 117 and Table 3.10, P.118) in HEIs, which offered international programmes, in Thailand and in Australia. In-depth interviews were conducted in each institution to seek out critical success policies associated with international programmes in approaching international students. Furthermore, the interview focused on trends in international education in each country from the international affairs officers' perspectives. The interview results were used to assist in the identification factors to identify factors affecting international students in making a decision to study in Thailand and in Australia (Melbourne). Moreover, the findings from the in-depth interviews were also used to assist in the development of appropriate strategies for HEIs in Thailand to attract more international students by learning from the experiences of Australia in offering the international higher education services to international students.

In-depth Interviews in Thailand

In Thailand, the qualitative research was conducted with autonomous (independent) HEIs, state and private HEIs under MUA that had provided international higher education service and international programmes using the English language as a medium of instruction. In addition, the qualitative survey also investigated two government departments, which were involved directly with international higher education service. Personal interviews were conducted at HEIs in Bangkok and bordering provinces. Due to time and budget limitations, telephone interviews were used for HEIs located in provinces that are beyond the borders of Bangkok. Interview request letters were sent to the total population of 37 HEIs under the MUA in Thailand and to two autonomous HEIs that offer international programs (MUA, 2001). In addition, request letters were posted to two government departments[1]. One of the government departments has direct responsibility to approve and control the quality of international programmes offered by

[1] The names of the two government departments may not be provided for reasons of confidentiality.

Thai HEIs. The other has taken the responsibility of promoting the international programmes offered by Thai HEIs to international students from target countries.

In-depth Interviews in Australia

In Australia, personal in-depth interviews were conducted only at HEIs that have their main campuses in Melbourne, due to budget and time constraints as well as the large area of the country. Therefore, interview request letters were sent to the total population of seven HEIs that have their main campuses in the Melbourne area.

After sending the request letters in both countries, telephone calls were made to respondents who had replied to the first request letter and granted permission for in-depth interviews in order to make an appointment. The first follow-up letters were sent to HEIs that did not reply to the first letter within one month. The second follow-up letters and electronic mail were sent to HEIs that did not reply to the first follow-up letter.

This study was conducted in two countries, thus it took time to conduct in-depth interviews and it was also very difficult to contact prospective samples for in-depth interviews. The details of the timeline for data collection in both countries are provided in Table 3.9, page 127 of this thesis and the interview request letter is shown in Appendices 7 and 8.

The in-depth interviews were conducted in the English language in Australia and in either English or Thai in Thailand, depending upon interviewees' nationality. The interview questions in the Thai language were used to conduct in-depth interviews with Thai respondents. The interview questions were translated by a researcher and were checked by two academic persons of a private HEI in Thailand (see Appendix 10). In-depth interviews were tape recorded and then transcribed in English.

3.6.4.2 Quantitative Research

The sample frame for the quantitative research of this study was international students, who were enroled at HEIs in Thailand and in Australia (Melbourne). Data collection methods are traded off strengths and weaknesses. Mail survey was chosen as a data collection method for this study because it was low cost, no interviewer bias and appropriate for the length of the questionnaire used in this study. Moreover, this method was used in many previous studies in the same area (BIE 1989; Gardiner, 1990; Steward and Felicetti, 1991; Mullin and Hancock, 1995; Nesdale et al. 1995; Joseph and Joseph, 2000; Pimpa, 2001; AEI, 2003b). Although major weakness of mail survey is low of response rate rewards were provided in order to motivate participants in returning questionnaires.

A request for participation was made to HEIs in both countries in order to obtain international students' contact details. Request letters for international students' contact details were sent to 37 HEIs under the MUA in Thailand and two autonomous HEIs that offer international programs (MUA, 2001). Over the period of collecting data (late 2001 to early 2002), the total population of international students who were enrolled at HEIs in Thailand was approximately 2,240 (DEP, 2002a). Request letters for international students' contact details was also sent for seven (7) HEIs in Melbourne. Over the period of collecting data in Australia (late 2001 to early 2002) the total population of international students who were enrolled at HEIs (included the University of Ballarat) in Victoria (onshore studying) was approximately 22,000 (AEI, 2001).

After sending the request letter in both countries, the first follow-up letters were sent to HEIs that did not reply to the first letter within one month. The second follow-up letters were electronic mail that were sent to HEIs that did not reply to the first follow-up letter. The request letter for international students' contact details is shown in Appendix 11.
Therefore, quantitative research for this study initially involved two sampling techniques. At the first stage, the purposive sampling technique was considered based on permission from HEIs in Thailand and in Australia in order to reach international who were enrolled at HEIs as onshore students in both countries. For the second stage, a

random sampling technique was chosen to select a sample (international students) from each HEI in order to assure that all sampling units (all international students) would have a chance to be part of the sample. Further, the mail survey technique was initially utilized for the return of the questionnaires for this study because it covered a large area, and was convenient for respondents. The questionnaires were distributed from each participating HEI and returned by the respondents from their homes. It was also appropriate for the length of the questionnaire.

3.7 Limitations of Data Collection for this Study

The main obstacle of data collection was the difficulty in obtaining permission from HEIs in both countries to gain access to contact details of their international students and also for in-depth interviews with persons involved with the international higher education service. Interview request letters and request letters for international students' contact details were posted to the HEIs that offered international higher education service in both countries. Two follow-up letters and electronic mailings were sent to HEIs that did not reply to the first request. In addition, electronic mailings were also sent to approach HEIs, which did not reply to the first three letters. The process of obtaining permission took three months in Thailand (November 2001-January 2002) and five months in Australia (December 2001- April 2002).

In Thailand, five HEIs declined to participate in this project for different reasons. Three of these HEIs declined to participate in this project on the basis that their HEIs were at the beginning stage in offering international higher education service. In addition, there were only two or three international students enrolled at their HEIs during the time that the research was conducted, thus they could not give sufficient information. One of the HEIs in Thailand refused to participate because the time that this project was being undertaken was the busiest period for that HEI. The last HEI that declined to participate in this project argued that this project is similar to an existing project being carried out at their HEI, therefore they did not give permission for either the in-depth interview or the survey with international students. In-depth interviews that were arranged failed in three

HEIs because interviewees forgot about the appointments and were too busy. There was no cooperation from twelve HEIs after sending three request letters, one electronic mail request and a telephone contact. Seventeen HEIs and one government department agreed to participate in the in-depth interviews. None of the HEIs that participated in the in-depth interviews could provide international student contact addresses due to confidentiality and privacy rule. Nevertheless, sixteen HEIs agreed to distribute questionnaires to the international students via their respective international offices. The remaining HEI did not have any international students (non-Thai nationality) enrolled at their HEI at the time the survey was conducted. Table 3.9 shows the positions and levels of the interviewees in this study which can confirm their expertise which involved with the international higher education service in Thailand.

Table 3.9 Position of interviewees in Thailand

Position of interviewee	Number of HEIs
Rector	5
Vice-rector for international affairs	7
Director of international college	2
Head of international affairs office	3
Head of international affairs department	1
Total	**18**

In Australia, the Information Privacy Act 2000 was proposed in December 2000 by the Victorian Government to take responsibility for handling and collecting personal information in the Victorian public sector (Department of Human Services, State Government of Victoria, 2003). This Act was announced on 1st September 2001 and covers all the Victorian public sectors. This was one of the reasons why there were difficulties in obtaining permission from HEIs in providing the contact details of their international students and also for in-depth interviews with persons involving the international higher education service. One of the HEIs declined to participate in this

project and there was no cooperation from two HEIs after sending three request letters, one electronic mail and making telephone contact.

Four HEIs agreed to participate with in-depth interviews, however they could not provide contact details of their students due to the confidentiality and privacy regulations. The researcher requested them to distribute questionnaires via the international offices of these four HEIs. One of them declined to distribute the material because their students were over surveyed and there was no cooperation from persons involved with the international students database in the remaining three HEIs. Table 3.10 presents the positions and levels of the interviewees in this study which can confirm their expertise which involved with the international higher education service in Australia.

Table 3.10 Position of interviewees in Australia

Position of interviewee	Number of HEIs
Pro Vice Chancellor (International)	1
Board of Director, ***International Pty. Ltd.	1
Executive Director, ***International	1
Manager of International Affairs Office	1
Total	**4**

*** The names of the HEIs may not be provided for reasons of confidentiality.

3.7.1 Method for Selection of Participants and Data Collection Methods for Quantitative Research

Owing to a lack of cooperation from HEIs in both countries in providing their international students contact details, as well as a lack of cooperation in distributing questionnaires, as discussed earlier, alternative methods of selection of participants and data collection methods were carried out, as discussed in this section. In addition, to increase the number of completed questionnaires, rewards were provided for

respondents who completed the questionnaire in both countries. This technique was also used by Aldrige and Rawly (1998) in their study of "Measuring customers satisfaction in higher education".

In Thailand

The purposive sampling technique was employed to select participants in Thailand. The "dropped off" technique was used for distribution of the questionnaires and the "mail survey" technique was used to receive returned questionnaires.

Questionnaires were delivered to the international affairs offices of sixteen institutions that had agreed to distribute questionnaires to the limited number of exchange or full time-full fees paying international students (non-Thai nationality). Therefore, one thousand one hundred and fifty-six (1,156) questionnaires were distributed to international students who enrolled at their HEIs during January and March 2002.

The questionnaires were distributed with a cover letter to each international student and reply-paid envelopes were provided to respondents to return the questionnaires. In order to increase the response rate of the survey, a cash prize of 5,000 Baht was awarded to two international students randomly selected from those who returned questionnaires within the time limitation. In addition, a small gift was awarded randomly to ten students.

With this technique, the researcher could not control effectiveness and the number of questionnaires, which were distributed by international offices in each HEI. This might have influenced the response rate and so become a limitation of this study.

In Australia

Owing to lack of cooperation from HEIs in Australia (Melbourne), it was necessary to use an alternative method to collect data from international students in Melbourne. Four hundred (400) questionnaires were provided for distribution to international students around Melbourne by the researcher. It was expected that the sample size would be between 200 and 300 over the allocated time. This sample size is similar to those used in previous studies involving international students (Gardiner and Hirst, 1990; Lawley, 1993; Mullins, Quintrell and Hancock, 1995). However, Hair et al. (1995) suggest that a sample size which exceeds 200-300 is acceptable Nevertheless, researchers should examine the significance of results in order to ensure that they have practical significance.

Since no permission had been granted from HEIs in Australia (Melbourne) to obtain data from international students, the "snowball" technique was used as an appropriate alternative method to select participants in Australia. This technique seeks to "identify a small number of individuals, who have the characteristics in which they (researchers) are interested" (Cohen, Manion and Morrison, 2000, p.104). Sampling by the snowball technique relies on the ability of researchers to locate an initial group of respondents with specific and desired characteristics (Churchill, 1996). Therefore, this technique was considered on the basis of specific international student characteristics, which were: a) they had to hold on overseas student visa; b) they could be exchange or full-time full-fees international students, who enrolled at one of the specific seven HEIs that have main campuses in Melbourne. Therefore, a small number of international students were identified, and they were used as informers to take the researcher to other international students who qualified for this study. The personal administering technique was used to collect data from these respondents.

Questionnaires were only distributed by using personal administering technique to international students aged over 18 years during April and June 2002. A cover letter was attached with the questionnaire to explain that their individual responses would be kept confidential and only a summary of the results would be reported in the thesis. If they decided to participate in this study they were required to provide separately their contact

details before returning the questionnaire to the researcher for a chance to receive a reward from the researcher. To increase the response rate, a cash prize of A$100 was given to each of two international students selected randomly and a small gift was awarded randomly to ten participants. However, it is difficult to get a large sample size by using a snowball sampling technique when the timeframe is limited. Therefore, the researcher considered this to be a limitation of the study. The response rates for the quantitative component of the research in both countries, and non-response issues are discussed in chapter 5.

3.8 Stage 5-Data Editing

The frequency procedure using the Statistical Package for Social Sciences Windows version 10.0 (SPSS 10.0) was run for all variables to check for errors of data entry. In order to ensure accuracy, consistency and reliability of the data, returned questionnaires were checked and edited for completeness. Incomplete questionnaires were classified into two groups: the first group contained questionnaires in which more than twenty-five percent of variables were not completed (Sekaran, 2000). Questionnaires in this group were excluded from the data analysis. The second group included incomplete questionnaires in which the number of variables without response was less than twenty-five percent, these were identified as having missing values in the data entry for the SPSS programme (Kinnear and Taylor, 1996; Sekaran, 2000).

3.9 Stage 6-Data Analysis

Both qualitative and quantitative research was used in this study. Qualitative data gathered from the in-depth interviews were analysed using the strategies of interview analysis suggested by Patton (1990) outlined in section 3.9.1. Descriptive and inferential statistics initially were used to analyse the quantitative data collected from the research instrument (questionnaire survey) with the use of the Statistical Package for the Social Sciences, Window version 10.0 (SPSS 10.0).

3.9.1 In-depth Interview

Goetz and LeCompete (1984) stated that qualitative method is a similar analytical process to other research forms but it can give more in-depth detail than quantitative statistical process. Nevertheless, there is no exact rule for the analysis of qualitative data. Patton (1990) has recommended that interview analysis be started by either case analysis or cross-case analysis.

In this study, case analysis of each interview was chosen as the starting point and this was followed by cross-case analysis (comparison of interviews). Further, interview data were related to objectives of the study and quotations were selected to support key ideas (Mariampolski, 2001). The raw data were transcribed from cassette tape and the results were initially written case by case. Cross-case analysis was then used by grouping answers from different interviewees and analyzing their viewpoints on the principal issues.

3.9.2 Survey Questionnaire

Two major types of quantitative analysis techniques were chosen to analyse the data for this study: descriptive and inferential statistical analysis.

3.9.2.1 Descriptive Statistics

Descriptive statistics may be used to classify, review and explain the profile of all respondents (Cohen and Holliday, 1982). In previous studies, descriptive statistics were used to present the data of the research project for example, "Exporting Australia's Tertiary Education Services" (Bureau of Industrial Economics, 1989) and "Export of Education Services" (Industry Commission, 1991). Thus, descriptive statistics using the frequencies analysis was considered to test hypothesis 4, *"When international students make a decision to enrol at HEIs in Thailand/Australia, they perceive that study in Thailand/Australia provides them high benefits";* hypothesis 5, *"When international*

students make a decision to enrol at HEIs in Thailand/Australia, they are aware of the risks of studying abroad".

Frequencies analysis was also used to test hypothesis 8, "*International students have a positive perception (their expectations have been met) towards the characteristics of the HEI after they have enrolled in their course in Thailand/Australia*", hypothesis 9 "*International students have a positive perception (their expectations have been met) towards the characteristics of the country (Thailand/Australia) they chose as their destination for study abroad"* and hypothesis 10, "*International students in Thailand/Australia eventually confirm the value of the international higher education service (at the confirmation/disconfirmation stage) offered by HEIs in Thailand/Australia (during their study) by intending to complete their studies"*.

Frequencies and percentages were also used to analyse international student characteristics, for example gender, their home countries, field of their study and the institutions where they were currently enrolled.

3.9.2.2 Inferential Statistics

Inferential statistics may be used to predict population parameters from respondents (sample) measures by using mathematical theories (Cohen and Holliday, 1982). In order to analyse data from a sample, parametric and non-parametric statistics are considered. Parametric methods are the most commonly used techniques for testing hypotheses. They can be used when exact population units are known (Cohen and Holliday, 1982). However, when it is difficult to make assumptions, when the population distribution is not normal, non-parametric methods are used to test hypotheses (Saengkaew, 2001). This may be called a "distribution free" process (Cohen and holliday, 1982) and is used when nominal or ordinal scales are used. For interval scales, they are converted to ordinal scales when non-parametric methods are applied (Saengkaew, 2001; Wechasarn, 2003).

Non-parametric methods were initially considered to test the hypotheses of this study because it was expected that the population distribution would not be normal. Therefore, parametric statistics were not applicable for this study. Non-parametric Spearman Correlation, was used to test hypotheses 1 to 3 and the Wilcoxson match-pairs signed-rank test was initially considered for testing hypotheses 6 to 7.

The Spearman Correlation Analysis

The Pearson Correlation is a parametric statistic used to measure association between two variables when both variables are normally distributed (Saengkaew, 2001). Nevertheless, when data or assumption are violated the non-parametric statistic based on the Spearman Correlation can be substituted (Morgan, Griego and Gloeckner, 2001). The Spearman Correlation analysis is appropriate to explain the degree of association between two variables when the data are at the ordinal scale or above (Cohen and holliday, 1982). The Spearman Correlation was used to test hypothesis 1, "*The more important the source of information, the greater the influence it has on influencing international students when making a decision to study in Thailand/ Australia"*, in order to explore the association between the importance and influence of sources of information which affected international students in making a decision to enrol at HEIs in Thailand/Australia at the *persuasion* and the *decision* stages in the model of "the International Students' Innovation Decision Process".

Hypothesis 2, "*The higher the expectation of an higher education institution characteristic, the greater the influence it has on influencing international students when making a decision to study in Thailand/Australia*", was tested to discover the association between the expectation (positive perception) about the HEI characteristic and influence of the HEI characteristics for international students in making a decision to enrol at HEIs in Thailand/Australia at the *persuasion* and *decision* stages of "the International Students' Innovation Decision Process" model.

Hypothesis 3, "*The higher the expectation of a country characteristic, the greater the influence it has on influencing international students when making a decision to study in Thailand/Australia"*, was tested to seek out the association between the expectation (positive perception) about a country characteristic and influence of country characteristics for international students in making a decision to enrol at HEIs in Thailand/Australia at the *persuasion* and *decision* stages of "the International Students' Innovation Decision Process" model.

Wilcoxson Match-Pairs Signed-Rank Test

Wilcoxson match-pairs signed-rank test is suitable to examine "the significance of difference between two samples consisting of matched pairs of subjects" (Cohen and Holliday, 1982, p.193). This technique was used to examine hypothesis 6,"*When international students are studying at HEIs in Thailand/Australia, they perceive that the benefits of study in Thailand/Australia are acceptable when compared to their perception of the benefits before they started studying"* and hypothesis 7, "*When international students are studying at HEIs in Thailand/Australia, they perceive that risks of study in Thailand/Australia are manageable when compared to their perception of the risks before they started studying"*. These were tested to explore the significance of difference in the perceptions of risks and benefits by international students when they make a decision to enrol at HEIs in Thailand/Australia (at the *persuasion* and *decision* stage) and at the implementation stage (when they were studying).

3.10 Limitations in Using Inferential Statistics

The difficulty of obtaining data for quantitative research affected the sample size of this study. Hair et al (1995) suggested that a sample size above 300 is statistically significant to test the hypotheses. The low response rate to the quantitative research in this study posed a problem of the testing hypotheses (the response issues and the response rate of quantitative research in this study are discussed in chapter 5). The researcher consulted with a professional statistician in order to resolve this problem. The statistician

suggested that due to the small sample size, inferential statistics might not be appropriate to test the hypotheses because the results would be meaningless. Therefore, descriptive statistics using frequencies and percentages were suggested as a substitute to test hypotheses 1 to 3 and 6 to 7, and the research results of this study should be identified as exploratory research. This is considered as a limitation of this study and the sample size for further research is discussed in chapter 7.

3.11 Ethical Considerations

Before conducting the main survey, the research proposal, interview questions and questionnaire for the mail survey were submitted to the Human Research Ethics Committee of Victoria University. Approval of the project had to be granted by the Human Research Ethics Committee of Victoria University to ensure the safety, liberty and rights of participants before conducting the interviews and mail survey. That approval was granted on 18 December 2001.

A cover sheet for the survey questionnaire was provided and attached to the questionnaire to explain the objectives of the study. Participants had to be informed that under the research ethics rules, their participation was entirely voluntary and that there were no risks, such as legal, psychological, moral or other risks. In addition, if they felt that the study was intrusive or they were reluctant to answer questions, they could withdraw at any stage of the process.

The in-depth interviews also had to be conducted with the interviewees consent. Before conducting the interviews, the aims of the project and the ethical rules had to be explained to participants. Each participant was also requested to sign the consent form (see Appendix 12) before starting the interview.

Complete questionnaires for the survey with international students in Thailand and in Australia, transcripts and tape recordings of the in-depth interviews had to be stored at the School of Hospitality, Tourism, and Marketing at Victoria University after analysis

by the researcher. All data are now held at the School of Hospitality, Tourism, and Marketing at Victoria University. Only the researcher and supervisors can access the data. In addition, the research results had to be presented in a form by which participants cannot be identified.

3.12 Timeline for Data Collection

The period of data collection in Australia and in Thailand is shown in Table 3.11.

Table 3.11 The Timeline of Data Collection in Australia and in Thailand

Research Activities	Dates
Question design for qualitative research	August-September 2001
Questionnaire construction for quantitative research	August-October 2001
Approval for the project was granted by the Ethics Committee	December 2001
Pre-testing of the survey questionnaire in Thailand/Australia	December 2001
Data collection (qualitative research in Thailand)	December 2001 – February 2002
Data collection (quantitative research in Thailand)	January – February 2002
Data collection (qualitative research in Australia)	February – May 2002
Data collection (quantitative research in Australia)	April – June 2002

3.13 Summary

This chapter provided an account and justification of the research methodology, including the ethical considerations of data collection, for this study. Qualitative and quantitative research approaches were both discussed as options for this study.

The exploratory research using secondary data analysis and an experiences survey was described. The suggestions from the experiences survey were used to clarify the research problems and helped in the development of the research instruments for this study. Research instruments for both qualitative and quantitative research were described and objectives of each question were explained. For qualitative research, the in-depth interview technique was chosen to collect data from respondents by using structured interviews (open-ended questions). The self-administered questionnaire was used for

quantitative research. Two versions of the test were produced in order to survey international students in Australia and in Thailand.

The validity and reliability of the research instruments for qualitative and quantitative research were also discussed in this chapter. Content validity was used to check the validity for both qualitative and quantitative research instruments. The parallel form technique was used to increase the reliability of the qualitative research and the test of internal consistency (inter-item consistency reliability) was used to check the reliability of the research instrument for quantitative research of this study.

The purposive sampling technique was used to select participants for the qualitative research both in Australia and in Thailand. The in-depth interview was used as the data collection method for the qualitative research in this study.

Initially, a multi-sampling method utilising purposive and random sampling techniques was considered for selecting participants, and the mail survey technique was chosen as a method to collect data for the quantitative research in both countries. However, the difficulty in obtaining permission to obtain contact details of international students from HEIs was the main obstacle. Therefore, alternative methods for the selection of participants and for the data collection methods were considered in both countries. In Australia, the snowball sampling technique was used to select participants and the personal administering technique was used to collect data from participants. In Thailand, the purposive sampling technique was chosen to select participants, while drop-off and mail survey techniques were used for data collection.

For analysis of the data obtained in the qualitative research, case analysis of each interview was chosen as the starting point followed by cross-case analyses (comparison of interviews) in order to analyse and interpret the results of the in-depth interviews. Descriptive and inferential statistics were initially considered for analyse of the data obtained from the quantitative research. However, the low response rate in this study prevented the use of inferential statistics to analyse the data. Therefore, descriptive statistics using frequencies and percentage analysis were substituted to describe the

results of the quantitative research. The results of the qualitative research will be reported in the next chapter.

Chapter 4
Results of Qualitative Research

4.1 Introduction

This study aimed to develop a new conceptual model of "the International Students' Innovation Decision Process". The study focused on factors affecting international students' decisions to enrol at HEIs in Australia (Melbourne) and in Thailand. In-depth interviews were conducted with persons who are involved with the international higher education service in Australian and Thai HEIs in order to explore critical success policies associated with international programmes.

The in-depth interviews in this study focused on trends in international education in each country from the international affairs officers' point of view. It was expected that the information from the in-depth interviews in this study would contribute new knowledge to how higher education institutions in Thailand can improve their international education service.

The in-depth interview questions were constructed with reference to previous studies based on Australia's experiences and then they were adapted into two versions, one was used to conduct in-depth interviews in Australia and the other one was used in Thailand. In addition, it was also hoped that the results from the in-depth interviews would be useful to help HEIs in Thailand attract more international students to study in the country.

Interview questions for this study focused on trends of the international higher education service in Thailand, the potential, threats and problems in offering international higher education service, benefits and risks to Thailand/Australia when offering international programs for international students and strategies to attract international students to study in both countries.

The results of the in-depth interviews with persons who are involved with international higher education service in Australia and Thailand are discussed in this chapter. The chapter consists of four main sections. The first section is the introduction. The second section provides the response rate and characteristics of persons who participated in the in-depth interviews. The third section presents the results from the respondents in Thailand. The results from the respondents in Australia are reported in the final section.

4.2 The Response Rate and Characteristics of Participating HEIs

A judgment sampling technique was used to select the sample in Thailand in order to ensure that the sample was selected from HEIs that provide international programmes with English as the medium of instruction. Interview request letters were sent to thirty seven (37) HEIs under the Ministry of University Affairs (MUA) in Thailand and to two (2) autonomous HEIs that provide international education service and offer programmes delivered in English. In addition, request letters were posted to two (2) government departments HEIs involved directly with the international higher education service in Thailand. In Australia, a judgment sampling technique was also chosen due to limited time and budget. Therefore, interview request letters were sent to seven HEIs that have head offices (main campus) in Melbourne.

The in-depth interview technique was chosen for collecting data from respondents in this study because through this method, in-depth information could be gathered from each respondent in each institution. Furthermore, interviewees could present their individual ideas without pressure. The in-depth interview also provides an opportunity for direct feedback from respondents.

4.2.1 Response Rate

The response rate in Thailand was 43%. Sixteen (16) HEIs under the Ministry of University Affairs (MUA), one (1) autonomous HEI and one (1) government department

granted interviews. In Melbourne, 57% (4 HEIs) gave permission for in-depth interviews with persons involved with the international higher education service.

4.2.2 Characteristics of Participating HEIs

Characteristics of Australian HEIs include the number of faculties, the number of campuses within and outside the country and the student population. The HEIs' characteristics in Thailand were reported in terms of the number of faculties, type of HEI, location and the student population.

Of the HEIs in Melbourne one (1) had 1 to 5 faculties, two (2) HEIs had 6 to 10 faculties and one (1) had more than 10 faculties. In Thailand, two (2) HEIs had between 1 to 5 faculties. Six (6) HEIs had 6 to 10 faculties, four (4) had 11 to 15 faculties and five (5) HEIs had more than 15 faculties. The number of faculties in participating HEIs in Melbourne and Thailand are summarised in Tables 4.1.

Table 4.1 The Number of Faculties of Participating HEIs in Australia (Melbourne) and in Thailand

Number of Faculties	Number of HEIs in Australia	Number of HEIs in Thailand
1 –5	1	2
6 – 10	2	6
11 – 15	1	4
More than 15	0	5
Total	**4**	**17**

Note: One participant in Thailand was a representative from a government department, therefore the number of faculties was not relevant.

In Australia, two (2) HEIs had a total number of students in the range of 20,001 to 30,0000. One (1) of them had more than 40,000 students. Information was not available for the remaining HEI in Australia. In Thailand, there were more than 1,001 students in

one (1) HEI and more than 20,000 in five HEIs. The total number of students in HEIs in Melbourne and in Thailand are shown in Table 4.2 and 4.3.

Table 4.2 The Total Number of Students in HEIs in Melbourne

Number of Students	Number of HEIs (Frequency)
Less than 10,001	-
10,001- 20,000	-
20,001- 30,000	2
30,001-40,000	-
More than 40,000	1
N/A	1
Total	**4**

Table 4.3 The Total Number of Students in HEIs in Thailand

Number of Students	Number of HEIs (Frequency)
Less than 1,001	1
1,001-5,000	4
5,001-10,000	3
10,001-15,000	2
15,001-20,000	2
More than 20,000	5
Total	**17**

Note: One participant in Thailand was a representative from a government department, therefore the number of faculties was not relevant.

The results of in-depth interviews in Thailand show that no HEIs had campuses outside the country. In Australia, the number of campuses inside and outside the country were noted. The results showed that two (2) HEIs had no campus outside the country. One (1) of them had 2 campuses and another one had 1 campus outside Australia. The results also indicate that one (1) HEI had more than 10 campuses within Australia and another one (1) had between 6-10 campuses in the country. Two (2) of the HEIs had 1 to 5 campuses within Australia.The number of campuses outside and inside the country of HEIs are shown in Table 4.4 and 4.5 respectively.

Table 4.4 The Number of Campuses Outside Australia

Number of campuses	Number of HEIs (Frequency)
No campuses in other countries	2
1	1
2	1
Total	**4**

Table 4.5 The Number of Campuses Inside Australia

Number of campuses	Number of HEIs (Frequency)
1 –5	2
6 – 10	1
More than 10	1
Total	**4**

In Thailand, types of HEIs and their locations were reported. The results of in-depth interviews show that HEIs in Thailand did not have campuses outside the country. Ten (10) HEIs were state owned, six (6) were private and one (1) of them was autonomous. The locations of participating HEIs were separated into two main areas: I) in Bangkok and its bordering provinces and II) in country regions. The data show that nine (9) HEIs were located in Bangkok and its bordering provinces and eight (8) were located in country regions. Types of HEIs and their location are summarised in Tables 4.6 and 4.7 respectively.

Table 4.6 Types of HEIs in Thailand

Types of HEIs	Number of HEIs (Frequency)
State HEIs	10
Private HEIs	6
Autonomous HEIs	1
Total	**17**

Note: One participant in Thailand was a representative from a government department, therefore the number of faculties was not relevant.

Table 4.7 Location of HEIs in Thailand

Location	Number of HEIs (Frequency)
Bangkok and its bordering provinces	9
Country regions	8
Total	**17**

Note: One participant in Thailand was a representative from a government department, therefore the number of faculties was not relevant.

Thus, when characteristics of participating HEIs in Thailand and in Australia are compared, it can be seen that while there was a larger number of faculties in HEIs in Thailand than in Australia. HEIs in Thailand had student numbers ranging from less than 1,001 to a large number of more than 20,000. Further, most HEIs in Thailand had no campuses in other countries unlike some of the participate ng HEIs in Australia. Finally, there were three (3) types of participating HEIs in Thailand (state, private and autonomous HEIs) whilst all the participating HEIs in Australia were state (receive Commonwealth funding) controlled.

4.3 In-depth Interviews Results in Thailand

Sixteen (16) HEIs under the Ministry of University Affairs (MUA), one (1) autonomous HEI and one (1) government department in Thailand granted permission for in-depth interviews with persons in charge of the international higher education service. The data obtained from the respondents focused on opportunities for Thai HEIs in offering a higher international education service as well as important reasons for offering international programmes in Thailand which included benefits and risks to the country. In addition, international education policies of the country, target markets and trends in the international education service were addressed. The following section summarises the data collected from respondents in Thailand.

4.3.1 Thailand as a New Country in Offering International Higher Education Service in the Asia-Pacific Region

Thai HEIs have now begun offering international education services for both Thai and international students. Normally, the Thai language is the medium of instruction for teaching in Thai HEIs. However, programmes delivered in English provide a new alternative to the education service normally offered by HEIs in Thailand. Data collected from respondents highlights the recent focus on the potential of Thai HEIs as a new entrant in the market to offer international education service in the Asia-Pacific region.

Sixteen of eighteen respondents agreed that HEIs in Thailand have enough potential to offer international higher education service in the world market, especially to neighboring countries such as Vietnam, Cambodia and Myanmar. Four respondents stated that the 'potential' for offering international programmes depends on the characteristics of each institution such as reputation and the length of experience in offering international programmes. HEIs in Thailand are able to provide quality programmes and have qualified lecturers to conduct these programmes. However, three respondents stated that although HEIs in Thailand have the potential for offering international programmes, there are some limitations. For example, they are still young and new in the international higher education business, English is not an official language in Thailand and there are strong competitors in the international higher education service including HEIs in countries like Singapore and Malaysia in the Asia Pacific region. One respondent from a state HEI noted:

> "...Thai HEIs have just started to focus on the international education service. It is hard to be the best country in offering international programmes. It is necessary to understand international students' needs and try to offer programmes that satisfy them. However, we need to go step by step and focus on students from neighboring countries..."
> (The respondent replied in the Thai language)[1]

[1]If the respondent did not reply in the English language, their response was translated into grammatical English.

Similarly, a respondent from a private HEI commented about the limitations of offering international programmes by HEIs in Thailand:

> " ...My impression of international programmes of Thai universities...I think my impression is that they are still very young, not very well known and still adjusting to the international context…"

The limitations in offering international programmes by Thai HEIs is also of concern to the government department in relation to Thailand's competitors. One respondent said that:

> "...In this region, Singapore is a leader because they use English as an official language, their education system is more developed than Thailand. However, Singapore has a limit in an increased number of international students and number of institutions..."
> (The respondent replied in the Thai language)

However, it was argued by a respondent from a private higher institution who disagrees with the concept of offering international programmes that:

> "...Institutions in Thailand want to improve the education system in order to reach 'academic knowledge' but the way they have done it (offering more international progrmmes) is not completely right in the terms of international education..."
> (The respondent replied in Thai language)

The results show that HEIs in Thailand have the ability to offer the international higher education service although they are still new in this service. However, they still need to extend their efforts in relation to the international students' needs, competitors and the quality of their services.

4.3.2 Reasons for the Increase in International Programmes offered by HEIs in Thailand over the last five years (1997-2002)

The number of higher education institutions in Thailand has increased significantly in the last five years, from fifteen (15) institutions in 1995 to thirty seven (37) institutions

in 2001 (MUA, 2001). Respondents' opinions about the important reasons for the increase in the number of international programmes in Thailand in the last five years are discussed here.

Fifteen of the respondents concurred that the international higher education service reflects a change of higher education around the world. The world has become "smaller" and international higher education is now more "globalised". There are now more multinational companies in Thailand and therefore it is necessary to have people who can deal with and work for those companies. International programmes offered by HEIs in Thailand can provide qualified people who are competent in using the English language and have the appropriate international skills to work for international companies

The globalisation way of thinking has led to HEIs in Thailand offering more international programmes to both local and international students. It is necessary for Thai HEIs to improve their education system in order to reach international standards and international programmes may lead HEIs around the world to accept the quality of HEIs of Thailand. A respondent from a private HEI who has much experience in the international education service in several countries in South East Asia said:

> "...Our students come from Malaysia, many from Malaysia, some from Singapore, Vietnam, Cambodia. They are students who go back to their countries or maybe go to other countries to work. They need to think globally and need to have abilities to be able to take their knowledge and apply it in the different context...so lateral thinking is important...."

The General Agreement on Trade and Services: (GATS) includes free trade of education services and this led to the higher competition among HEIs in Thailand (Office of the National Education Commision: ONEC, 2001). Several respondents from state and private HEIs claimed high competition among HEIs as an important reason for the increase in the number of international programmes in Thailand in the last decade. Thus, many existing HEIs need to offer international programmes as an alternative for

prospective students. One respondent from a private HEI gave this as one of the reasons for the increase in the number of international programmes offered by Thai HEIs over the period 1997-2000.

Another reason for HEIs in Thailand offering international programmes is the revenue for the institution. One of the respondents from a private institution said that it is the main reason. In addition, several respondents from state institutions commented that some state HEIs are preparing to become autonomous HEIs, therefore they need to earn more money for survival because the Thai government will reduce their educational funding. Offering international programmes is one solution to earning more money because students pay higher tuition fees than for programmes conducted in the Thai language. A respondent from a state university said:

> "...It is the government policy to change the state HEIs to be autonomous. It means some funding will be reduced therefore it is necessary for state HEIs to offer a wide range of programmes in order to attract more students and international programmes is one good solution..."
> (The respondent replied in The Thai language)

Four respondents cited the Asian crisis in 1997 as a reason for an increase in the number of international programmes offered by HEIs in Thailand. In 1997, the Thai government deferred scholarships given to Thai students for studying abroad. Therefore, the MUA required HEIs in Thailand to provide international programmes (especially at the postgraduate level) to support those students. In addition, over that period some Thai students who intended to study abroad by their own funding could not afford to pay tuition fees and other expenses. Thus, international programmes offered by HEIs in Thailand substitute those needs. If Thai students had a chance to study international programmes delivered in English in their own country it could save them lots of money.

The Thai government has a policy to promote Thailand to be a centre of education among neighboring countries. The Prime Minister (Dr. Taksin Shinavatra) made this announcement to the parliament on 26 February 2001 (ONEC, 2001). From this policy,

the ONEC organized a seminar on “the Policy and strategies for the international education service of Thailand” on 25 July 2001. The vision of the international higher education service was that “Thailand will be an international education centre which emphasizes the international multi-culture in this region” (ONEC, 2001, p.137). In accordance with this policy, two respondents from state HEIs said that increasing the number of international programmes and the number of international students was part of a strategy to accomplish the government policy. Finally, two respondents asserted that the demand in programmes by local students who want their courses delivered in the English language has increased and so Thai HEIs have attempted to offer more international programmes in order to meet this demand. One of the respondents said:

> “..It is not only the demand by local students but also there is an increase of demand by students from our neighboring countries...”
> (The respondent replied in the Thai language)

One respondent from a private institution who had reservations, made a comment about international programmes offered by HEIs in Thailand as follows:

> “...International programmes in Thailand increased significantly because universities only want to satisfy the demand of some Thai people but they were not concerned about the quality of the programmes...”
> and
> “...In my opinion, Thai HEIs offer international programmes following the western countries’ education system and think this is the way to upgrade Thai universities to reach the international standard...”
> (The respondent replied in the Thai language)

4.3.3 Benefits and Risks to Thailand in Offering International Programmes to International Students

Having international students in Thailand provides huge benefits for both HEIs and the country. Respondents gave several viewpoints on the national benefits from having international students from around the world studying in Thailand. One of these benefits

is that a wide range of experiences have been shared among international students and the community. Fourteen respondents assented to this view. It is an opportunity for both Thai students and other Thai people to learn about people who have different cultures, languages and ways of thinking. Thai students and people in the community are able to gain a broader perspective due to their interactions with other people who come from different places in the world. In the same way, foreign students also have a chance to broaden their own perspective about Thailand, which is good for Thailand in promoting the country. Furthermore, the revenue to HEIs and to the country in the long-term was mentioned by almost all respondents as a benefit gained from international students. Not only tuition fees that international students pay but also for living costs, for example for accommodation and food, are good for the community surrounding HEI areas.

It is also good for other businesses in Thailand such as travel agents and the airline industry. These businesses can earn more money from international students when they want to spend leisure time in Thailand and also from their parents, friends and relatives who come to visit them. Most of the respondents agreed that international programmes offered by Thai HEIs should be able to help the Thai economy but it is not happening at the moment because there is still only a small number of international students in Thailand. One of the respondents from a private HEIs said:

> "...For Thailand, I think it is important because it is the way of exporting something Thailand has. I think by bringing students into Thailand for their education, they come and spend money here, bring their parents here, they bring their brothers and sisters here so, more people come to learn about Thailand and its cultures and its values and they go back to their work places with a broader perspective, I think. It is a very enriching process living in Thailand..."

However, the respondent from the government department commented that:

> "...For money, it is only a consequential by-product (international programmes). We cannot say Thailand will be able to earn lots of money from offering international programmes..."
> (The respondent replied in the Thai language)

Other benefits included political stability, international trade and business, and economic expansion which were identified by five respondents as long term benefits in offering international higher education service. This was confirmed by a respondent from the autonomous HEI:

> "...We (everyone in the community) have been aware of being with each other...so when they (international students) develop a network, when they want to do a business or they want to develop a relationship, they will be better because they understand each other better..."

Respondents were also asked about risks of offering international programmes to international students in order to find out the risks which face to HEIs and to Thailand. None of the respondents recognised any risks which may occur to the country. It was perceived that non-Thai people who are well educated do not pose a problem for Thailand. A respondent from an autonomous HEI commented that it is good to bring somebody's knowledge from outside the country and there are no risks or any disadvantages in mixing people together.

4.3.4 International Students in Thailand

Data gathered from the respondents in this study show that international students in Thailand come from around the world. More than half of the HEIs in Thailand have students from both neighboring countries and other Asian countries, for example China, Japan, Nepal and India. In addition, some of the international students come from European countries and from the USA as exchange students. However, all these respondents confirmed that the majority of students were from neighboring countries, for example Laos, Cambodia, Myanmar and Vietnam. Most of the international students in Thai HEIs are full time, full fee paying students. There were two HEIs (one state and the other private) in which the international students in their HEIs were exchange students.

4.3.5 Factors Affecting international Students in Making a Decision to study in Thailand

There are many factors which affect international students in deciding to study at HEIs in Thailand. Those mentioned by respondents included HEIs characteristics, country characteristics and sources of information.

4.3.5.1 Sources of Information to Communicate with International Students

In order to provide information for international students, appropriate means to deliver this information to them are considered as crucial for introducing HEIs in Thailand to potential students. One of the most effective ways to give information to international students is through the institutions website. Seventeen respondents agreed on this point and there was only one, from a private HEI, that did not mention this channel. The government representative commented that a website is a low cost channel and almost everyone can access information about Thai HEIs in this way.

Education exhibitions were considered to be a good way of providing information about Thai HEIs and about Thailand to international students in target countries. However, one of the respondents said:

> "...Education exhibitions are good to create international students' awareness about HEIs in Thailand but they are not a very effective channel to recruit target students..."
> (The respondent replied in the Thai language)

This was supported by the respondent from the government department who said:

> "...We arrange education exhibitions in some target countries for example, Vietnam, Khunming (in China) and Myanmar by cooperating with other government departments. The objective of arranging exhibitions is we want to create the knowledge and awareness about the international higher education service for prospective students..."
> (The respondent replied in the Thai language)

In addition, respondents from one private and one autonomous HEI commented that arranging the education exhibitions by HEIs is also an effective way to pass on information to international students. Both of these HEIs arranged education exhibitions by themselves regularly without government support.

HEIs' partners (academic institutions) in overseas countries also provide another mean of passing on information about HEIs in Thailand to prospective students. This was noted by six of the respondents. Two of them claimed that not only HEI's partners but also alumni in those countries are effective sources for disseminating information.

Word of mouth communication was recommended by six respondents as an effective way of circulating information to international students. This information can be passed on through international students who use to study in HEIs in Thailand to other students in their home countries. Friends or relatives of prospective students who have had experiences in Thailand are also a good source of information for international students who intend to study abroad. All six respondents agreed that word of mouth communication is a source of information for students in making a decision to study in Thailand.

The final effective source of information suggested by one of the respondents from a state HEI and also by the government representative is Thai government offices in overseas countries, for example Thai consulates, Thai embassies and the Tourism Authority of Thailand. The government representative said:

> "...We send some documents about international programmes to Thai embassies in overseas countries. They help a lot in giving information to students. It is necessary to use this channel to deliver information because we still do not have an education centre like IDP..."
> (The respondent replied in the Thai language)

It was remarkable that there was only one respondent, who was from a private HEI ,who recommended private agents as an important source of information. More than half of the respondents commented that private agents may be helpful for recruitment of

international students but they did not think it is a very important source to use. Some of them thought private agents were not reliable and were also costly for management. Of the seventeen respondents in this study, only one respondent said their institution used private agents to recruit international students from target countries. Nevertheless, the government representative suggested that:

> "...Agents are necessary for some countries such as China because there is a complicated system to recruit international students from there..."
> (The respondent replied in the Thai language)

It was difficult for respondents to specify the most effective sources of information for raising awareness of international programmes at their HEIs. However, almost all of them thought that a website is the best source of information for prospective students. The respondents said the majority of international students in Thailand used the internet to find information about HEIs in Thailand. The respondents also stated that the website tends to be a more important and more useful source to communicate with target students.

4.3.5.2 HEIs Characteristics

Fourteen respondents agreed that the distinctive characteristics of programmes constitute one of the important factors that influence students from overseas countries to enrol at HEIs in Thailnad. Particular characteristics of international programmes offered by HEIs in Thailand, which can attract international students such as the length of the study period and quality of programmes were noted. In addition, the unique programmes, for example Thai studies, tropical agriculture, rural management development and marine science were identified as attractive programmes for international students. Joint programmes with HEIs in western countries were stated by two respondents one from a state and one from a private HEI, as attracting international students when making a decision to enrol at HEIs in Thailand. The location of HEIs is a factor that affects international students to choose a particular place for their studies. This was revealed by three respondents from HEIs located in the regional parts of Thailand. In addition, five

respondents from both state and private HEIs' suggested that facilities should be a factor considered by international students when making a decision to study abroad. Important HEI facilities and services such as library, financial support and accommodation should be provided by HEIs in order to make international students more comfortable living and studying in Thailand. Finally, two respondents from well known state HEIs noted that the HEI's reputation is one of the factors affecting international students when selecting an HEI for their studies.

4.3.5.3 Country Characteristics

Unique Thai features such as culture, food and language, as well as the characteristics of Thai people were mentioned by twelve respondents from both state and private HEIs as characteristics affecting international students to come to Thailand. Several respondents said that the unique characteristics of Thailand, for example Thai culture and Thai food strongly attracts international students from western countries who want to discover the eastern way of life.

Eight respondents, from both state and private HEIs noted that the low cost of living and reasonable tuition fees were also powerful factors which can attract international students. Furthermore, several respondents said that the location of Thailand is a factor for international students from neighboring countries because Thailand is not far from their home countries.

4.3.6 Current International Higher Education Service Policy in Thailand

Having more international students in Thailand has been very useful for HEIs and the country in many respects. The results of the in-depth interviews indicated that HEIs and the Thai government should focus on a policy to help institutions to offer an international higher education service to prospective students. In order to increase the potential in offering international programmes and the number of students, policies of both HEIs and the government should be collaborative.

All respondents, from both state and private HEIs agreed that HEIs in Thailand should concentrate on improving international programmes in order to reach international standards and be recognised by other countries. The Thai HEIs were attempting to provide international programmes which can satisfy international student needs and be useful for their careers in the future. Only one respondent from a private HEI acknowledged that their HEI had a policy to increase the number of international students. Other respondents said HEIs in Thailand did not have a strong plan to increase the number of international students in their HEIs. Further, it was noted that only one state HEI in a country region had a policy to undertake marketing strategies for attracting international students. Three HEIs did not have an obvious policy about an international higher education service. Two state HEIs and one private HEI had international programmes which were soon to be cancelled due to internal management problems.

The respondent from the government department said that the main policy of the Thai government was for an increase in cooperative programmes between Thai HEIs and HEIs in other countries. For example staff and student exchange programmes in order to improve the quality of international programmes in their HEIs. An increase in the number of international students was also the government policy for offering international programmes in Thailand but it was not the major objective. Furthermore, some scholarships were provided for students from neighboring countries such as Laos, Cambodia and Myanmar which is good for long-term relationships between Thailand and those countries. It was also a way of promoting international programmes offered by HEIs of Thailand.

Respondents also stated that the Thai government has attempted to introduce international programmes by arranging education exhibitions in other countries such as China and Cambodia. Finally, the government has a project to establish an organisation which can provide information about the international education service in Thailand by cooperating with HEIs in giving information and consultation to international students in

target countries. Recently, Thailand has used other government departments such as the Thai embassy and the Tourism Authority of Thailand (TAT) in overseas countries to promote the international education services of Thailand. They have been helpful but they do not have education specialists to take responsibility as education consultants for international students.

Thus, it can be seen that many policy aspects have been considered in order to help Thai HEIs to promote their international programmes. Nevertheless, most of the respondents from state and private HEIs agreed that it is difficult for HEIs to follow government planning because, although the government has policies in place, there have been no obvious actions to implement them. The majority of respondents commented that the most distinctive support the government has given is education exhibitions which do not have enough potential to promote the international higher education service of Thailand.

4.3.7 Trends in Offering International Education Service in Thailand

In order to expand the international higher education service in the global market, it is necessary for Thai HEIs and the government to understand the trends of this business. All respondents agreed that the outlook for the international higher education service in Thailand for the next five years is favorable. Demand from international students has increased significantly in HEIs in Thailand, especially from neighboring countries. Therefore, it is necessary for both the Thai government sector and HEIs to cooperate in order to improve international higher education services. The in-depth interview with the respondent from the government department indicated that the Thai government has a policy to improve international education services in Thailand and also to increase the number of international students from outside the country. Furthermore, several respondents said that Thai HEIs have attempted to increase the number of international students by providing collaborative international programmes with HEIs from other countries in line with the government policy.

A recommendation about making better opportunities for international education service in Thailand was made by respondents from two private HEIs. One of them said:

> "...It (Thai international higher education service) will go well if the government concentrates more on promoting international higher education service by asking for cooperation from other countries. The big step is to create recognition in target countries..."
> (The respondent replied in the Thai language)

This was supported by another respondent:

> "...If the government does not support the international higher education service properly, it seems to be difficult to introduce international programmes to target countries. It will take a long time to be recognised by international students..."
> (The respondent replied in the Thai language)

The majority of students who were enrolled in international programmes at the time of the survey were local students. This appeared to be the case for both state and private HEIs in Thailand. Only the autonomous HEI had a policy on the proportion of students of different nationalities to target for enrolementsments. This autonomous HEI has a policy of not accepting more than 20% from each nationality. Nevertheless, after the Asian crisis in 1997, the percentage of local students (Thai nationality) has slightly increased to be more than 37% in this autonomous HEI. However, HEIs and the Thai government have attempted to increase the number of international students from other countries in order to keep a balance between the proportion of local and foreign students, thus creating an international atmosphere and achieving the theme of international education.

4.3.8 International Higher Education Service: Is it commercial?

International higher education service is a controversial venture in countries where this service is offered to international students. Two respondents who work in state HEIs, claimed that the international education service in Thailand is not commercial. One of these respondents said:

> "...A university is not a company..."
> (The respondent replied in the Thai language)

In addition, the government representative also supported this by saying that:

> "...International education in Thailand does not focus on the revenue. Thai HEIs do not use marketing led education. International service is not commercial..."
> (The respondent replied in the Thai language)

Nevertheless, the majority of respondents, from both state and private HEIs agreed, that international education is commercial. It cannot be refuted that HEIs need funding but they also need to be concerned about the quality of education. One of the respondents from a state HEI said:

> "...It is ok to think about increased revenue for a university, but for the education service, we need to be concerned about the quality because it is the key of the service..."
> (The respondent replied in the Thai language)

Similarly, one respondent from a private HEI supported this idea:

> "...A university needs money but it is not the main objective. They should have a philosophy of contributing knowledge and transferring it to students including providing quality programmes and good teaching for them. If they can offer good programmes to international students then they can earn money..."
> (The respondent replied in the Thai language)

4.3.9 Problems in Offering International Higher Education Service in Thailand

Although the trend for the international higher education service in Thailand looks good, there are still some problems seen by some of the respondents, largely because Thailand is still a new country offering this service in the global market. A diverse range of problems has been recognised by the respondents.

Firstly, there is the problem of English usage in Thailand. Almost half of the respondents mentioned that it is difficult to convince international students to come to study international programmes delivered in the English language because it is not an official language in Thailand. This problem extends also to communication difficulty between international students and local people who cannot speak English.

Secondly, there is much bureaucracy to cope with in Thailand. Some government sectors involved with international students, for example the immigration office, were noted as being bureaucratic. There is still no student visa in Thailand, thus it is necessary for the international affairs offices of each HEI to carefully manage the visa issues. However, this matter is now under government consideration. In addition, it is difficult to find efficient bilingual staff to work in Thai HEIs.

Thirdly, the way of life in Thailand, Thai food and Thai culture may be important in attracting international students but these were also mentioned by some respondents as posing problems for international students when they first arrived.

Fourthly, some HEIs are not ready to offer international programmes because, for example, they have insufficient academic resources and/or staff cannot communicate well in English. These may give international students a negative perception of the international higher education service in Thailand. Furthermore, some HEIs in Thailand offer that “international programmes” from the “Thai curriculum” which does not fit in with the concept of international education. Thus, it is necessary to clarify the desirable objectives and structure of international programmes. Some HEIs also have not put a tutorial system in place to support the delivery of international programmes.

Finally, the respondents noted that there was a conflict across government sectors about the objectives of offering an international education service. The Thai government sectors have worked together in offering international education service but they have different objectives to manage, for example one government sector focuses on the revenue of the country whilst another government sector and HEIs focus on the quality of education service.

4.4 In-depth Interviews Results in Australia

In Australia, interview request letters were sent to persons involved with international education services in seven HEIs that have their head offices (main campus) in Melbourne and permission was granted by four HEIs to conduct in-depth interviews. The in-depth interview in Australia focused on benefits and risks to Australia in offering international programmes to international students, existing policies of HEIs and the government, including the trends of the international higher education service. Furthermore, characteristics of their target groups, factors attracting international students to study in Australia and techniques used to communicate with international students were investigated.

4.4.1 Benefits and Risks to Australia in Offering International Programmes to International Students

All respondents agreed that benefits to Australia of having international students in the country are huge. All of them concurred that international education is an element in the process of globalisation. It has been happening slowly and gradually and helps Australia to maintain educational standards at a global level.

There is cultural exchange among international students, which gives them a greater understanding of each other and Australian students have a chance to learn about people from other countries. In addition, all students can get exposure to people from different parts of the world and learn how to live with others. Such comments were made by three of the respondents and one of them said:

> "...The most important benefit is we are living together...and the prime benefit for me is that facilitation of the global community..."

The financial benefit to Australia is massive. This was noted by all of the respondents. It is of economic value for Australia and it also helps both HEIs and their surrounding

communities. The international education business can help HEIs to generate revenue in order to improve facilities and capacities of their education resources. In a direct way, the surrounding communities can receive benefits from this service in the housing, airline and tourism industries. One respondent noted that the enormous financial benefit to Australia is approximately four billion dollars per year.

In order to find out about the risks in offering an international education service, respondents were asked about the negative impacts which may happen to Australia. Three of them claimed that they have not seen any obvious risks from international students. Immigration of international students after finishing their degree was not considered to be a risk to the country as it should be good to have well educated people in the country. The opinion of one respondent was:

> "...Australia has the demand for well educated skilled people. For international students who are qualified, they are an advantage for Australia because if those students work in Australian community, they will be understanding people from different countries. It is very useful because they will understand cultural difference..."

It was mentioned by one respondent that a risk in offering an international education service is having too many people from only one culture. For some HEIs, there are too many students from the same countries, which is not good for the international education system. Another risk that was mentioned by respondents is that Australian HEIs are being too dependent on certain markets (Asian market). This affected the HEIs' revenue when the market declined after the Asian crisis in 1997. Therefore, some HEIs have started to look for other markets to which they can offer their international higher education service.

4.4.2 International Students in Australia

All participants revealed that international students in Australia come from around the world but especially from South East Asian Countries. Asian students make up the largest number of international students in Australia. HEIs in Australia (Melbourne)

have attempted to penetrate other markets apart from Asian countries. They have started looking for students from Latin America, Africa, the Middle East and some parts of Europe. One respondent said:

> "...The largest number of international students come from Asian countries at the moment but we want to get much more of a balance across the world. We are looking for part of Europe, particularly from Scandinavia, and South Africa...."

In addition, this participant commented that Scandinavian students who want to study abroad for a short period, want to explore both western and Asian cultures. Thus Australia is a good place for them to learn both western and eastern cultures because it is a country that has many people from different parts of the world.

All participants agreed that the majority of international students in Australian HEIs are full time and pay full fees. However, they are still interested in exchange students. Two of them said that they have lots of agreements with partner HEIs in other countries for student exchange programmes. One of them said:

> "...We are interested in exchange students but we do not have as many as we want because we re-organised many things and the exchange programme is separate from here (international affairs office). It stopped operating for a period of time. Now, they are re-structured. We try to increase the number of exchange students. We have agreements with some universities in other countries..."

One of the respondents noticed that an exchange programme is valuable, especially for young students to move around the world to gain international experiences. It is useful but it is necessary to be careful in operation as one respondent said:

> "...We have exchange students in small numbers because we need to make a balance with partner universities, because the fees are waived for them, we cannot afford, we need to be careful. If we have five exchange students we need to send five students too...."

All respondents said that they do not set an exact proportion of local and international students. It can be 10-30% of international students compared to 70-90% local students. It depends on the programme in which international students enrole. One of the respondents commented that:

> "... It has not been serious to do that (set the proportion), no formal university policy but for some schools, such as the school of business has an informal limit of around 30%. It is not university policy..."

4.4.3 Factors Affecting International Students in Making a Decision to Study in Australia

The respondents from four Australian HEIs mentioned a number of different factors affecting international students who come to study in Australia.

4.4.3.1 Sources of Information to Communicate with International Students

Good communication channels are important to HEIs for passing information to international students in target countries. In this study an attempt has been made to discover effective sources of information, which help Australian HEIs succeed in sending information to international students.

From data collected in Australia, all respondents agreed that websites and private agents are appropriate sources for sending information to international students. Two of them mentioned education exhibitions as part of a marketing strategy, which can provide good information to international students.

However, two respondents did not agree that education exhibitions are good channels for helping international students receive HEI information. They said that it is not a major vehicle for distributing information to students. As one of them said:

> "...We tend to invest lots of money because everybody does it, but the best way to communicate with students is the agents..."

Finally, printed materials such as HEI handbooks and brochures were noted as a suitable sources to deliver information to international students.

Two respondents said that it was difficult to identify the most successful sources of information for raising awareness of international programmes offered by Thai HEIs because it depended on the way that students receive it. Some students may not be able to access the internet, therefore, the use of various sources of information is the best thing that HEIs can do. Two respondents commented that private agents are the most successful and the strongest way of providing information, and recruiting international students for Australian HEIs. Contacting private agents can help students make a decision more easily because it is a two-way communication. In this way, international students have an opportunity to find out more details about Australian international higher education services and they are able to ask questions about what they want to know from those agents.

All respondents agreed that private agents are effective sources of information in helping HEIs in the recruitment of international students. HEIs in Australia use many private agents for sending information to target students and also to recruit students from target countries. One respondent said about IDP (a large Australian private agent):

> "...IDP is not more important than others except they are global so have many more channels...."

Therefore, Australian HEIs not only use IDP but they also use some small private agents to promote their programmes to international students. All of the respondents said that most of their private agents are good performers because they train and control their agents very carefully, whether big or small agents. One of them noted that the best characteristics for effective private agents included reliability:

> "...We try to have agents who we think they give a concern (sic), honest and realistic information to students. If we found agents were not reliable, we need to review, to discontinue..."

4.4.3.2 HEIs Characteristics

The quality and standard of Australian education, reputation of Australian HEIs including various programmes they provide for international students and reasonable tuition fees are very important factors needed to attract international students to select Australia as the country for their study abroad.

4.4.3.3 Country Characteristics

International experiences, attractive life style and good climate in Australia (Melbourne) are factors affecting international students to come to study in Australia. Australia is also not far from Asian students' home countries, which is good for both international students and their parents when they want to visit each other. An opportunity for migration is another attractive factor which international students from some countries consider before coming to study in Australia. The Australian government gives international students who are qualified a chance to apply for permanent residency. In addition, two respondents noted that the competitive cost of living is the selling point for Australia compared to the United States of America and the United Kingdom. However, one of these respondents also commented that the cost of study and cost of living may not constitute the main factor that attracts students, but it may be a powerful factor that attracts them. This respondent said:

> "...Cost of money is not always the main factor to come to overseas but it can be strong..."

4.4.4 Current International Higher Education Service Policies in Australia

There are huge benefits to Australia in offering international programmes to international students. It is necessary to maintain the reputation of HEIs and the country by focusing on the policies which will keep existing international students satisfied with the service and increase the number of new international students.

Data collected from all respondents shows that the quality of the international higher education service is the main policy with which they are concerned. They agree that they need to pay more attention to increasing the quality of the international higher education service of their HEIs. At this time, Australian HEIs have started to look for new markets to which they can offer their service, for example South America, Africa, Middle East and Scandinavian countries. In addition, three respondents said that the international student population should come from various countries.

The Australian government has taken an interest in the policy of offering an international higher education service to students around the world because it brings an enormous benefit to Australia. Respondents mentioned the support given by the government from a number of different viewpoints. Two of the respondents stated that the government provides educational counselors, for example Australian Education Centres (AECs) which has been operated by Australian Education International (AEI) in some target countries to promote HEIs and Australia at the macro level but this is not very active. One of the respondents stated that the government also provides some scholarships for international students to support the Australian international education service. The government also seems to support the international higher education service by making adjustments to existing policies such as the immigration policy but two respondents did not see these actions as particularly helpful. One of them said:

> "...We have been involved with the department of immigration and we do not believe that some new regulation is helpful for international students such as visa requirements now are very difficult for some people..."

4.4.5 Trends in offering International Higher Education Service in Australia

In conducting strategic planning for the international higher education service, market trends remain a major concern for Australian HEIs. All respondents agreed that the demand by international students who want to study abroad is still increasing. The recruitment of international students from Asian countries remains strong and some of the new markets, for example Scandinavia, Latin America and Africa are also expected to show strong growth. One of the respondents commented that:

> "...The trends will still be in (sic) for students who look for study overseas and in their own countries, especially in (sic) graduate level. It makes the world smaller, people want to move around for working so international education can give them a chance. A good degree helps them to go to international companies..."

Although the demand by international students is still growing Australian HEIs are still concerned about competitors and their services. One of the respondents said that the major competitors are the United States of America and the United Kingdom. Some Asian HEIs, such as HEIs in Singapore and Hong Kong, are also identified as Australia's competitors although they are not major ones. In addition, one respondent commented:

> "...University needs to become kind, friendly to students in every aspect. Not only from the international office but also from the teaching side because students pay money so they require good quality performances and good quality service..."

Expanding campuses into other countries is a trend that Australian HEIs have followed in offering a service to international students in their home countries. Some HEIs have campuses in other countries because the demand in those countries is growing, especially at the postgraduate level and people may not want to leave their countries to study abroad. Two of the respondents said that they have campuses in overseas countries, for example in Vietnam. They agreed that it is part of globalisation and that it is a marketing issue. There is a demand for Australian HEIs in those countries so having campuses there can help them reach the target markets easily. One of the respondents

strongly agreed with the idea of having campuses in other countries because the world is changing and HEIs need to adapt themselves:

> "...We live in a very competitive world. If campuses are available in other countries and they can offer international education in the high standard and people choose to go there, I think why not..."

These two respondents also commented about some advantages of having campuses in other countries. They claimed that it is a way to reach target students and it is a new development in the delivery of knowledge to students. It also helps other types of marketing for HEIs in Australia

Another two respondents said that they do not have campuses in other countries. However, they have offered programmes in collaboration with local providers which can assist them to promote their HEIs as well.

4.4.6 International Higher Education Service: Is it commercial?

There have been questions as to whether an international higher education service is a commercial venture in Australia. All respondents agreed it is commercial in reality because they look forward to the income that international students bring into the country. It happens even in the United States of America and in the United Kingdom but Australia may look more aggressive. Australian HEIs do many marketing activities in target countries. Some European countries such as Scandinavia and Germany think the way Australia has done this is too aggressive, too commercial, because some countries in Europe are very traditional.

Nevertheless, two respondents noticed that Australian HEIs have been concerned about the quality they provide for students. One of them suggested that:

> " ...I think Australia should look at the way they think and we should be working more about strong academic, not just recruit students and marketing should be presenting the

> lifestyle of living in Australia. We should change the aim of the sense of marketing but on the other hand it may affect the revenue..."

It is still controversial for an international education service to be viewed as a type of business. It is difficult to tell what should be the appropriate level of marketing activities to present this service to target groups.

4.5 Summary

The results for the qualitative research (in-depth interviews) in this study were reported in this chapter. Opinions about the current international higher education service, as well as perceived trends in Thailand and Australia were presented. Finally, five major problems in offering this service in Thaialnd, a new country in offering an international higher education service, were also identified in this chapter.

In the next chapter, the results of quantitative research (survey with international students) in both countries will be reported. The results of both qualitative and quantitative researches of this study will be discussed with the results of previous studies in chapter 6.